

PSYCHOLOGY AND ETHICS

A Study of the Sense of Obligation

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TO L. S. H.

IN MEMORY OF A PROMISE

PREFACE

This book attempts to take the subject of ethics out of the clouds and to give it solid anchorage in the psychology of everyday life. Only when this objective is achieved can rules of conduct and moral principles be expressed that will guide us safely in the world of tomorrow. Ethical topics as here considered become subject to ordinary scientific inspection—to observation, classification, analysis, and reasonable argument, verifiable by others. Ethical phenomena lend themselves in some respects, as we have here shown, to measurement and to experimental study.

It is a mistake to suppose that moral principles alone remain fixed and unchangeable while everything else around us grows and develops. The science of social relations, it is true, lags behind the advances of physics, chemistry, and technology. Since human relations change with social institutions it is urgent that our ethical concepts be reviewed, reformulated, and, if possible, re-inspired. Such a survey of ethics is one of the aims of this book.

Among the motives for writing the book some lie in the realm of systematic thought and some in the field of practical applications. Traditional systems of ethical doctrine do not relate very closely to contemporary activities and ideals, and they are often based on antiquated descriptions of our minds and misguided accounts of human motives. Moral principles for our own day need to be expressed in terms of our current understanding of human nature, and some progress toward this goal is here attempted.

On the other hand, the contemporary schools of psychology have in common a scant respect for the fundamental human experiences known as conscience, the sense of obligation, the feeling expressed by "ought." Personality and character tend to be analyzed into their elements, and motivation is reduced to

the operation of reflexes or the activity of instincts. Psychology as now taught makes little endeavor to provide the student with opportunity or encouragement to consider a design for living. This book indicates some of the ways in which improved insight into the meaning and origin of moral obligation may contribute toward the attainment of happiness as well as toward a revision of psychology.

In investigating these matters the author has been led to make constant use of a point of view and set of principles that have proved constructive in other psychological fields such as mental development, education, the thought processes, and psychopathology. These systematic conceptions of motivation, learning, and control have instructive results when applied to the analysis of moral obligations. They yield sound insight into the various meanings of "ought" that underlie the field of morals and facilitate an eclectic ethical doctrine that is here elaborated.

Among the more practical considerations several may be here indicated. Experience with the personal adjustments of college students has shown that many of their problems hinge on moral dilemmas. Perhaps because of the declining vogue of philosophical studies, these students have little skill and less practice in the logical analysis of their difficulties. Nevertheless they have achieved a degree of freedom from such dogmatic codes as may have been impressed upon them in childhood. Now they find themselves with no satisfying principles of moral guidance except imitation and safety. Some of these students became well acquainted with the development of this book, and they reported that the principles herein presented opened up to them new and valuable ways of considering ethical problems.

In the experimental studies that led to the list of ten fundamental imperatives presented in the book we were surprised by the varying degrees of insight exhibited by persons of similar age and training. As students of delinquency have long realized, there are striking individual differences in moral understanding. Our own observations led to the development of a test or scale for the measurement of ethical insight. This is

presented in full detail along with many suggestions for its practical use. Based on these studies also is the outline of a proposed course of ethical training. If the materials of this book can make any contribution to the technique of effective moral instruction, that alone would justify it.

It is hoped that the book will prove useful in courses in education, social psychology, human relations, and ethics. Teachers and administrators in high school and college should find it helpful in counseling their students, in understanding them, and in promoting their emotional health. Social and religious workers, guidance experts, personnel advisers, and students of delinquency should find helpful suggestions in the ethical viewpoint and the conceptions of motivation and happiness here presented. Last, but not least, this book is respectfully offered for serious consideration to all those leaders of men who by thought, word, or deed aspire to guide mankind toward a happy and a peaceful destiny.

From time to time we are warned that only a revival of morals can preserve security in our civilization. What variety of moral doctrine is compatible with the modern temper? Perhaps a scientific approach to ethics, such as that undertaken in this book, may lead to a type of moral insight that the world of tomorrow will find workable and congenial.

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PSYCHOLOGY AND ETHICS

CHAPTER 1

THE MEANINGS OF OUGHT

If men were born free they would, so long as they remained free, form no conception of good and evil.—SPINOZA.¹

Introduction

The key to morals or ethics is the feeling of obligation, the recognition of imperatives in thought and action. It is the sense of obligation that transforms mere behavior into conduct. In our own day the sense of obligation has been severely jeopardized by rapid and worldwide changes in social life, in science, in technology, in government and politics. If moral principles are to endure they must be reflectively scrutinized, revised, and reformulated to meet the conditions and characteristics of our age. The chapters that follow attempt to make some contribution to the complicated task of providing modern men and women with an outlook which, without being narrow, is nevertheless moral.

In an isolationist age small groups of people could form compact and relatively independent units. Difficulties of communication and travel would encourage the fixation of separate cultures and provincial standards of conduct. In such cloistered groups codes of morals could evolve, each locally accepted as "the way, the truth, and the light." But mutual acquaintance and interchange of ideas would soon temper the absolutism of such codes. Denominational creeds would then conflict; theories of value and systems of philosophy would appear dis-

¹ The quotations from Spinoza which introduce the various chapters are from *The Living Thoughts of Spinoza*, by Arnold Zweig, with the permission of the publishers, David McKay Company, Philadelphia.

cordant; nationalistic ideologies would require some sort of compromise or reconciliation.

Rivalries and adjustments, occasioned by the impact of one culture upon another, would be reflected in the attitudes and judgments of individuals, with consequent instabilities of conduct and of character. Blind allegiance to provincial codes might then give way to mental confusion and emotional chaos; or to a wholly skeptical and opportunistic moral philosophy; or, in more thoughtful natures, to a search for some synthesis or revaluation which might preserve a sense of obligation and of right in the midst of contradictions. Such a synthesis is the subject of this volume, and the first step is an inquiry into the nature and varieties of the sense of obligation.

Among the events that happen and the things that people do there are some to which we are not indifferent. Some things meet with approval or disapproval; we consider them in relation to some standard, some expectation, some sanction. They are the things that *ought* or *ought not* to be; the deeds which *should* or *should not* be committed. They are the good events and the bad; the blessings and the calamities; the virtues and the vices. In connection with such acts or conclusions there is felt to be some imperative—some inner necessity or some outer constraint. There is in them some spiritual or mechanical coercion which leads us to apply to them such terms as *obligation*, *duty*, *demand*, *propriety*, *requiredness*. Such things involve values, moral principles.

Acts involving such sanctions and imperatives we call *conduct*. They contain the ethical features of behavior. It might be said that the principles of conduct constitute the theme of this volume. Good conduct includes the things that ought to be done; misconduct is the doing of what ought not to be. Our interest is not in the things but in the *oughts*. We leave to general psychology the study of how these acts are discovered, the ways in which they are learned and mastered, the degree to which they are remembered. Our primary concern is with the motive that animates them, with the imperatives that are back of their coerciveness, with the sanctions and taboos that accompany them.

Whence come the imperatives that sanction some acts, some events, some arrangements, and disapprove others? What are the controls that guide our behavior? What, if anything, is the difference between the things we want to do and the things we ought to do? What is the feeling of duty or obligation and how does it originate? Are the oughts all of one kind or are they diverse? If various, what is the character and the range of their variety? Are there numerous and independent categories of ought, or is there behind them all some common principle? If there are varieties of ought, the assertion that this or that ought to be will depend for its meaning and importance on which of these imperatives is acting.

And how about our perception of these categories? How fully aware are people of the variety of these imperatives? Are they in general capable of clear discrimination between or among them? Are there notable individual differences in such ethical insight, and if so what causes these differences? Is it possible to devise a scheme for the measurement or diagnosis of such ethical capacities, and what form would such a scale assume? What results are found when such a scale is applied? Does ethical insight develop with increasing age or education? Is it a function of intelligence, or of experience, or of special training? Do such results have any bearing on the desirability or effectiveness of what we ordinarily call moral instruction? Do they have any relation to the incidence of delinquency? What can be said about the psychological make-up of the delinquent, and how can social delinquency be understood?

What accounts do the various systems of psychology give of these imperatives, and of the feelings of obligation and duty? If it is necessary to revise our general account of mental life in order to accommodate these facts of ethical experience, what form does such a revision assume? And how about the classical systems or theories of ethics? Are they based on a sound systematic account of the human mind, or upon an artificial and perhaps erroneous conception? If the systems differ in these respects, what is to be said for the differences between them?

Here are plenty of questions. We can ask them quickly

enough, but must answer them slowly and one at a time. We shall turn first to the variety and character of the imperatives commonly encountered. How many and just what are they? What are their respective peculiarities and differences, and to what extent may they be synthesized on the basis of general principles? In keeping with the spirit of the times our approach shall be, whenever possible, by the experimental method and by comparative analysis. Our answers should be verifiable by others, not merely spun out of our own prejudices.

Varieties of Ought

It is not enough to depend on a dictionary to learn about the variety of oughts. Webster gives five chief meanings of the word, and one of these is called obsolete, but experiments show that the list of meanings must be considerably extended, and more carefully analyzed and defined. Our verdicts of necessity, obligation, propriety are more complexly determined than the dictionary suspects.

The experiments to be reported took the form of giving individuals packs of cards, each card bearing a statement containing the word *ought*. They were asked to examine the propositions carefully and then to put them in piles according to the nature of the oughts in the different statements. Each person was free to form as many piles or categories as he wished, the only condition being that in each pile all of the oughts should be of the same kind. When this task was finished, each person was then asked to write out a statement of the nature or basis of the ought in each of the categories, or to state how the various groups differed one from another.

For our present purpose we need consider only the consensus of opinion of our most sophisticated judges. According to these results, we must recognize some nine or ten varieties of imperative. These nine or ten categories accommodate all of the varieties of ought discriminated by intelligent and educated adults in the sample list of propositions we have used in this experiment.

To make the nature of the instructions perfectly clear for this experiment it may be well to consider two or three ex-

amples. Take first these two propositions, both of which occur in the list:

The fish ought to bite well this morning.
Children ought to obey their parents.

Both propositions involve an imperative, as is shown by the presence of the *ought* in each of them; but these two oughts are not wholly alike in character or meaning. To state that the fish ought to bite well this morning means that the fish will be inclined to do so and the chances are that they will, not as a matter of duty but on some other ground. But to assert that children ought to obey their parents more or less implies that they probably will not and that at least they will not be inclined to do so, except perhaps as a matter of duty. These two oughts therefore belong in different categories.

Now take a third proposition, such as "Radishes ought to grow well in this corner of the garden," and decide with which of the previous two assertions this one belongs. Clearly it does not belong in the same category with "Children ought to obey their parents," for we do not attribute duty to radishes. But it goes very well with "The fish ought to bite well this morning" because in both cases all that is stated is that circumstances are favorable for the occurrence of the thing predicted.

Proceed in this way with all the propositions, placing each along with others that resemble it in the general character of the "ought" that it contains. We do not care whether the proposition is correct or not; whether it is important or not; whether or not there is adequate evidence for it. We are interested only in the character of the ought in such a statement, if anyone should make it. Many samples of such propositions will be found in Chapter 2 and in Appendix I.

How many varieties of ought are found? What is the basis or nature of the *oughtness*, the imperative, in each variety? How might all these varieties be grouped together under some major principle, if this be possible? What light does this throw on the nature of ought as a characteristic of conduct? Such topics as these are the first to be investigated in our survey of the dynamics of conduct.

There seems to be no fundamental objection to our some-

what colloquial use of the word *ought*. The dictionary gives *ought* and *should* as synonyms, adding that "both express obligation, *ought* commonly suggesting duty or moral constraint, *should* the obligation of fitness, propriety, expediency." Actually either word would serve our purpose, which is first to investigate the varieties of "obligation"; but we prefer *ought* because it more effectually expresses the imperative or requiredness aspect of obligation.

A Classification Elaborated

When we classify such propositions according to the arrangements made by our most highly qualified judges we find nine or ten kinds of ought. Let us consider each in turn.

1. INFERENCE. About a quarter of our statements appear to assert that something follows logically from certain premises. Sometimes one premise is given, as in "The morning is clear; we ought to have a fine day." Here the major premise—"Clear mornings are followed by fine weather"—is implicit, and the minor premise is given.

In other statements the premises are not stated nor so obviously implied. Consider the following examples:

This ought to be the road to Boston.

This ought to be about where I lost it.

This ought to be enough material for a coat.

Here there is no suggestion of the particular premises; nevertheless there is the vague implication: "In the light of this and that, it naturally follows that. . . ."

In all these cases the ought is a *logical* one and the compulsion is intellectual, more or less factual. Their general ground might be expressed by saying "The world is such that so and so naturally results," or perhaps by "The laws of thought lead necessarily to this conclusion." For the conclusion not to be sound, for the imperative not to operate, would mean either that (a) the uniformity of nature is upset; (b) the laws of thought are no longer valid; (c) the premises are false; or (d) our reasoning has been inadequate. The compulsion felt

in the ought asserts our confidence in the orderliness of the universe and in the validity of our thinking. We call this the category of logical *Inference* and designate it for convenience by the capital letter *I*.

2. COMPLETENESS (*Gestalt*). Sometimes the ought seems to imply simply that some larger pattern, organization, picture, system, or, to use a modern term, some *Gestalt* calls coercively for the act mentioned. Some occasion seems to demand or require it, to enforce it or compel it. For it not to occur would be inappropriate, not suitable, unfitting. For it to occur (or not, as the case may be) would exemplify (or do violence to) the tendency of an incomplete figure to complete itself in the best possible manner. Consider these cases:

We won the game and we ought to celebrate.

Every man ought to have two wives.

You ought to have seen him make a fool of himself.

A classification ought to provide for all the actual cases.

According to *Gestalt* principles an uncompleted configuration is the occasion of a stress or strain which leads to a striving for completion; and a *poor* figure is also in stress and strives to change in the direction of *better organization*. Certain details have what is called a "belongingness" with other details or with certain total patterns, with a field. The absence of a needed detail is the occasion of a *requiredness*; the presence of a jarring detail will be the occasion of a *rejection*. The cases we have listed here appear to belong under such a description. We call this the category of *Completeness* or *Gestalt*, and designate it by the letter *G*.

3. BEAUTY (*Esthetics*). The third category might perhaps include or be included in the second. But we give it independent place because the imperative so clearly arises out of a *sense of taste*, out of *esthetic* preferences. Consider the following:

Such a room ought to be painted a lighter color.

This pudding ought to have more sugar in it.

That black cover ought to have a gold border.

You ought to have your hair cut.

These conclusions do not follow syllogistically from any premises. They can scarcely represent genuine Gestalt principles because they really express individual feelings, however much they may parade themselves as objective rules or relations. Tastes differ, and what is meant in such cases seems to be "My taste would prefer that" or "My taste would be offended if." Only a few of these could properly be included under category 2 with any claim to universality. We therefore call this the *Esthetic* category, the imperative of *Beauty*, and its key letter is *B*.

4. SOCIAL WELFARE. About a dozen of our statements seem to mean by their ought that "Social welfare would be promoted if . . ." For the act to occur or not to occur would make for a better world—would minimize sorrow and trouble, reduce unhappiness and misery for people in general. Consider these:

Every man ought to have a chance to work.

Children ought to obey their parents.

Some cure for that disease ought to be discovered.

Every family ought to live within its income.

Persons who are closely related ought not to marry.

This category seems to differ from the three preceding it. The logical character of the conclusion is not apparent; no Gestalt that demands it is specified; there is something more than esthetic preference asserted. The implication might be stated as follows:

"Life is full of sorrow and some of this might be ameliorated if . . ." That is, the ought seems to indicate a way of reducing the general misery, of increasing the sum total of happiness. In a way this category resembles the one that follows it, which has to do with practical expediences for useful ends. But in the present category the grounding or justification of the technique in the reduction of communal distress is especially emphatic. We call this the category of *Welfare*, designated by the letter *W*.

5. UTILITY. Under the fifth category belong perhaps a fifth of the random propositions in our list. They have in common

a fairly clear assertion of the general form: "If you want to accomplish so and so this is the most effective way to do it." Consider, for example:

Potatoes ought to be planted during the full moon.

Hitler ought not to have attacked Russia.

You ought to grip the handle more loosely.

This axe ought to have a longer handle.

Arithmetic ought to precede algebra.

Garden peas ought to be soaked before planting.

The oughts indicate certain details of tactics, strategy, technology, trade practice, form, efficient methodology. There is back of all of them the implication "You will spare yourself labor or disappointment in one or another thing you appear to be up to if you do it so and so."

The nature of the specific goal is usually clear enough, even when it is not expressly stipulated:

If you want potatoes to grow, plant them this way.

To avoid defeat, Hitler should have left Russia alone.

If you want algebra to be easier, start with arithmetic.

If you would avoid bad strokes, grip the handle loosely.

Now a want is a lack, a deprivation, a form of misery that the individual seeks to alleviate by some undertaking. The ought in this category 5 directly asserts that a certain action or avoidance is best calculated to relieve a more or less explicit distress. Statements placed in certain other categories might also have been placed here. On the other hand, it is also true that some of these statements could fit well enough in some of the other categories. It seems likely that certain oughts belong at the same time in *more than one* of our categories—that there is such a thing as *multiple motivation*. Perhaps indeed this is the rule; we shall comment on it more fully at a later point. We call this the category of *Utility* and its key letter is *U*.

6. DUTY. In the next group belong a number of statements in which the basis of the ought appears to be a certain theory of life, a value system, religious scruples, a point of view. Often the source of the scruple is not indicated. The idea seems

to be that it is wrong to do so and so because that would be incompatible with or forbidden by such and such a code of behavior, or that, conversely, such and such should be done in order to achieve such compatibility.

Statements placed in this group often appear to be classifiable under other categories as well; so much depends on what the speaker would say if asked to elaborate. Thus:

"Every man ought to keep his promises" might have an esthetic, a social, or an expediency basis; but under this heading it more likely means simply "It is wrong not to."

"Capital punishment ought to be abolished" might be variously grounded, but placed in this group it probably means "The Commandments say thou shalt not kill."

Similarly with "The strong ought to bear the burdens of the weak," which might be placed here because the Bible says "Bear ye one another's burdens."

If "A man ought to tell the truth regardless of consequences," it is likely to be because of some deep-seated philosophical conviction or else simply because the Good Book says "Thou shalt not bear false witness."

Under this category of Duty would belong the commands of revered authority; the injunctions of exponents of accepted faiths and creeds; the tenets of fraternities, lodges, and similar groups; the traits of idolized heroes; the implications of special philosophies, beliefs, and systems of thought; the personal ideals adopted as a preferred guide to conduct and to the judgment of others.

Violations of injunctions under this group are supposed to be particularly likely to result in a sense of guilt, a feeling of sin, shame, remorse, or other form of self-recriminative subjective misery. So much is this the case that to many minds this category may appear to represent the only type of imperative to which the term *ethical* properly applies. Correlated with the guilty conscience, in violations of such imperatives, is the probability of strong disapproval on the part of others. We may pity the one who ignores the imperatives of beauty, of

completion, of logic, or of health, but we are less likely to call him a sinner than if he violates a personal ideal or the Golden Rule. The type of distress especially associated with imperatives of this group is moral guilt, or conscience, although we shall endeavor to show that this narrow application of these terms is quite unjustified. This group of imperatives we call the category of *Duty*, and its key letter is *D*.

7. SAFETY (Hygiene). A dozen or more of our statements of oughts refer to the goal of personal safety, or to some code of mental, bodily, or social hygiene. They indicate that such and such things are safe or dangerous, are directly conducive or inimical to mental or physical welfare, or to personal success and happiness. The basis of the ought is very clear in these cases—it points to certain techniques presumed to be effective aids to the safety, balance, health, personality, success, prestige, or longevity of the actor. Consider these:

You ought not to dive with your eyes shut.

Uncooked fruit ought not to be consumed along with beer.

You ought to wear heavier clothing in the winter.

Youth ought not to be impatient with the prejudices of the old.

Everyone ought to sleep at least eight hours a day.

Every flesh wound ought to be kept clean.

One ought to be careful in the choice of friends.

Everyone ought to have a hobby as well as a main occupation.

We might state the general principle in such cases as "If you do or do not do these various things it may be to your sorrow." Or, somewhat more positively, "These are ways of avoiding or minimizing mental, bodily, and social injury."

Again, the ought does nothing essentially but indicate certain techniques in their relation to specific wants. It is the *safety* or *personal welfare* character that gives the wants their hygienic aspect and distinguishes this category from others. And again, there may easily be an overlapping of categories—that is, some of these oughts may be doubly determined; there may be *more than one reason* for them. And some of these imperatives on the other hand may clash with other imperatives, so that something like a hierarchy of oughts may be felt to exist, some wants

being *more coercive* than others. The nature of such a hierarchy may be an important aspect of *personality*. It may be useful to consider these possibilities more fully at a later time. This is the *S* category, that of *Safety*.

8. CUSTOM (Convention). Only a few of our statements belong under the heading of conventional propriety, but it is clear that such statements could be multiplied. Consider the following:

The wedding ring ought to be worn on the third finger of the left hand.

In making introductions the younger person ought to be presented to the older.

When walking with a lady a man ought to take the outside, next to the curb.

With a full-dress suit a man ought to wear a white tie.

In America a driver ought to keep to the right side of the road.

What we are told in these statements is that certain acts are "proper" or "conventional"—are current and local etiquette. In order not to be like the marching boy whose mother exclaimed, "Just look; all the men are out of step except our John!"—do things thus and so.

No other basis of the ought is asserted, although it may well be that historically the practices had a more substantial utilitarian, ethical, social, or hygienic ground. They may now survive as sheer vestigial remains, like tonsils and wisdom teeth. Still, not to observe them marks you in a certain uncomfortable way and may interfere with your self-esteem, your peace of mind, your social status, and even with your business success.

To avoid these possible embarrassments, do thus and so, because these are the ways now approved and practiced by your associates. If you would avoid being avoided by the better people, do this and that the way they do.

It may well enough be that sound justification can be found for many of these folkways and rules of etiquette in contemporary life. But these justifications are seldom conscious to those who adopt them. For the most part the statements simply indi-

cate how to act so as not to be in the social wrong. This is the category of *Custom* or *Convention*, designated by the letter *C*.

9. JUSTICE. We come finally to the last of our primary categories. Consider:

Teachers ought to be willing to work for small salaries.

Income tax ought to take into account a man's age and obligations.

Everyone ought to be satisfied with eighty years of life.

Every dog ought to be entitled to two bites.

Women and men ought to receive the same pay.

There ought to be a law against that.

People ought to be allowed to vote after their eighteenth birthdays.

It is possible that some of these might fairly enough be put under such categories as logical necessity, demand by a Gestalt, esthetics, ethics, hygiene, or utility. But I am inclined to believe that we need another category. Why, for example, ought every dog to be entitled to two bites? And just why ought men and women to receive the same pay? Or why not, for that matter? And why ought people to be allowed to vote after their eighteenth birthdays, or, for that matter, allowed to vote at all?

Sometimes, apparently, we can only say that justice and equity are best served by such and such practices. Now the demands of justice do not seem at once to fall under our preceding categories, although a sufficiently profound philosophical analysis might succeed in placing them there. The sense of fairness, the passion for justice, are things not adequately treated by contemporary psychology, but they are powerful influences and can be easily and violently outraged. For many persons a violation of justice, an act of unfairness, is as distressing as an ache or pain; but when justice is served—and remember that she is blind—we are content.

There appears to be no strong emotion accompanying the ordinary execution of justice; that we more or less take for granted. But when the sense of fairness is outraged our emotions are violently excited, and the experience is distressing.

Oughts of this category seem essentially to indicate procedures to be followed in order that this distress shall be minimized or avoided. This category of *Justice* is designated by the letter *J*.

10. LEGISLATION. In addition to these nine primary categories there appears to be at least one more, although the status of its imperatives is secondary and somewhat equivocal. This is the category of legal or statutory prescription. Examples are:

To vote in November you ought to be over twenty-one years of age.

Those who drive cars on public highways ought to have drivers' permits.

Real estate owners ought to be responsible for the taxes levied against their property.

According to the traffic signs cars on this road ought not to go over twenty-five miles an hour.

Persons who are going to be married in New York ought to secure marriage licenses from the proper authority.

To many persons a legal prescription is one of the most coercive of imperatives, a form of requiredness both definite and strong. Motivation to obey such an ought ranges from mere expediency and fear, through social and ethical considerations, to the very abstract and generalized conviction that "the law ought to be respected." In such cases it appears to be "peace of mind" that is desired—the oughts indicate ways of avoiding punishment, shame, or remorse.

But there is also a human tendency to react negatively against statutory prohibitions or prescriptions. "Trespassing positively forbidden under penalty of the law" may provoke depredations that might otherwise never have been tempting. A venture-some kind of sport may be found in deceiving the teacher, the police, the ration board, or the internal revenue collector. In such cases the legal prescription has no direct requiredness. The ought, if present, comes in some of the ways indicated in the preceding categories and would be subject to the kind of analysis there given.

On the whole, then, the legal category does not appear to

represent a fundamental imperative, although this may appear somewhat surprising. Statutory prescriptions may indeed conflict with obligations, rights, and urges that are otherwise approved, and they undergo frequent revision. One reason for this is of course that the law does not pretend to state what the individual *feels* like doing. Instead it specifies the thing that *others* wish him to do. The law might be said to be framed for malefactors, not for those of good intentions.

The law often prescribes acts which would not be otherwise motivated by the imperatives of individual experience, and for this very reason. It tells the minority what the majority will require of it. But the requiredness of the act, for the power that writes the law, is not statutory. Laws are not, or should not be, made merely for the fun of having them. Acts that acquire their original imperative on other grounds merely receive an added urgency when framed in statutes.

The legal imperative is therefore secondary to the nine categories that precede it in our list, and it seems unnecessary to accord it the more intensive examination to be given the primary imperatives. It may however, if only for the convenience of round numbers, be included in the list of ten categories with which we may later seek to develop a diagnostic test or measure of ethical discrimination. This being the legal category, that of *Law* or Legislation, we may designate it by the letter *L*.

Multiple Imperatives

We have already observed that some oughts appear to belong in more than one of these categories. It is in fact difficult to find imperatives that belong in one and only one of these groups. Just as most events have multiple causation and result from a great many contributing factors, so most of our acts and conclusions have complex justifications. These partial justifications may even be contradictory, or involve contradictory acts. Consider the proposition "A motor car ought to have effective brakes." This can be at one and the same time an ought of Completion, of Good Taste, of Social Welfare, of

CLASSIFICATION OF IMPERATIVES NEEDED TO ACCOMMODATE
THE ARRANGEMENTS MADE BY REPRESENTATIVE
INTELLIGENT ADULT JUDGES

Group	General Characteristics	Category	Key
1	Certain premises lead logically to the conclusion.	Oughts of INFERENCE	I
2	Some occasion or Gestalt calls for or requires it.	Oughts of COMPLETION	G
3	Esthetic sense or taste demands it.	Oughts of BEAUTY	B
4	Social welfare prescribes it.	Oughts of WELFARE	W
5	Practical expediency or utility is the reason.	Oughts of UTILITY	U
6	Ethical or religious scruples, or matters of conscience, are involved.	Oughts of DUTY	D
7	Some code of personal safety or hygiene suggests.	Oughts of SAFETY	S
8	Conventional propriety or custom.	Oughts of CUSTOM	C
9	Justice and equity demand.	Oughts of JUSTICE	J
10	The law requires.	Oughts of LEGISLATION	L

Practical Utility, of Duty, of Safety, of Justice, and of Legislation. How then shall it be classified? Obviously its classification depends on which of these imperatives is felt to be most prominent, for they all work consistently in the same direction; otherwise we shall need separate groups for oughts that have multiple determination.

Then consider the proposition "Capital punishment ought to be abolished." Such imperative as this receives from duty, esthetics, justice, and social welfare may be negated by conflicting imperatives of utility, safety, custom, and legislation. Fortunately we are not here engaged in unraveling the complex motivation of any particular imperative proposition, but in as-

certaining first of all what varieties of motivation are available. To this enterprise the overlapping of categories imposes no barrier, although the development of a scale or test making use of such classifications might have to reckon with this complication.

That the presence of multiple imperatives is sometimes responsible for ambiguity in the classification of obligations is neatly illustrated in what are called the rules of the game, as in chess, bridge, baseball. One who engages with others in such pastimes encounters a variety of oughts and ought nots. The pawn ought not to be left unguarded; pieces ought not to be touched unless they are to be moved; the knight must make moves of only a certain character, and such moves the bishop ought not to make; the queen ought not to be advanced too early in the game; and so on endlessly.

These rules of the game, like the rules of life, often have multiple and perhaps obscure determination. In a sense they are legislative, being laws applying by common consent of the players. They may also be rules of expediency; they may follow logically from certain prior premises; they may be considered the conventions, the etiquette of the game; they might fall under such headings as those of esthetics, Gestalt completion, codes of individual safety and personal success. To an experienced player such rules may have the coerciveness of a duty, similar to the trade conscience of the workman.

At any rate consideration of the requirements imposed on the player by the rules of the game serves to suggest that even greater complexity may be expected in the obligations to be found in the more realistic game of living together, whether in peace and harmony or in conflict and war. Part of the difficulty in establishing international laws may come from the fact that there is no one category of obligation on which such principles can be solely based.

Although we here find it necessary to accord a place to all these numerous imperative categories, each has been declared by one or another enthusiast to be the sole basis of moral doctrine. A detailed discussion of the significance of this fact might be instructive, but we shall do no more at this point than cite a few brief statements illustrating it.

A later chapter will consider the endeavor of the Gestalt psychology to base all obligation on the principle of *Completeness*.

It has been said of Bentham, a famous Utilitarian, that "His language seems sometimes to imply that he is explaining moral phenomena; in reality he wishes to alter or rearrange them according to a working rule gathered from his reflections on *legislation*."

As for the category of logical *inference*, idealists since the time of Kant have explicitly emphasized reason and intellectual consistency as the ultimate authority in moral affairs.

The category of *Safety* is predominant in Herbert Spencer's declaration that those acts are good which are adapted to preserve life in its fullest form, for self, progeny, and fellow citizens.

Special enthusiasms for the remaining categories are illustrated by the following quotations.

Beauty: "Taste is not only a part and an index of morality; it is the *only* morality. The first and last and closest trial question to any living creature is 'What do you like?'"—RUSKIN.

Custom: "The laws of conscience, which we pretend to be derived from nature, proceed from custom; everyone having an inward veneration for the opinion and manners approved amongst his own people cannot without very great reluctance depart from them."—MONTAIGNE.

"The mores can make anything right."—SUMNER.

Duty: "Let us hear the conclusion of the whole matter. Fear God and keep his commandments; for this is the whole duty of man."—ECCLESIASTES.

Justice: "Justice is a name for certain classes of moral rules which concern the essentials of human wellbeing more nearly, and are therefore of more absolute obligation, than any other rules for the guidance of life."—J. S. MILL.

Utility: "If utility is the ultimate source of moral obligation, utility may be invoked to decide between them when their demands are incompatible."—MILL.

Welfare: "A moral rule is a statement of a condition of social welfare."—LESLIE STEPHEN.

Three Significant Observations

We have now discovered, surveyed, illustrated, and briefly interpreted nine or ten varieties of ought. Perhaps there are more. Perhaps some of these could be combined to give a smaller total number. But in the light of what we are now to observe such considerations give us little serious concern.

First of all, does it not seem that practically all of human activity is included in these categories, at least all activity that has what we ordinarily call a *voluntary* character? If you include the things done or not done out of logical necessity, because the occasion or our personal taste and appetite call for them, for their practical utility, for health and safety, for personal and social welfare, for the sake of duty or conventional propriety, in the interests of justice, and because legally required, what of human activity remains? Of course the misdeeds, the sins, whether of omission or of commission, are covered by the injunctions, as well as the recommended techniques.

If this rather sweeping observation is sound, and so it now appears to be, a rather significant generalization can be made. Acts involving an ought have no peculiar status in our behavior. Everything we do is animated by an imperative, actuated by an ought. For these categories of ought appear to include all of our behavior.

There are of course these different *varieties* of ought, each being coercive and as it were dictatorial. The oughts of logical necessity, of Gestalt completion, of esthetics, duty, social welfare, hygiene, practical utility, propriety, justice, and law are recognizably different in their ground, to be sure, but the imperative is common to them all.

The "moral law within" which Kant extolled as one of the two marvels of the universe, along with "the starry heavens without," was apparently much overrated by him. We ourselves, in turn, seem to have lost the definition of *conduct* with which we began so confidently. We can, however, still study behavior with special reference to some sanction or expectation, neglecting such things as its components, its time and space

relations, its ease or difficulty, the course of its acquisition, and so on.

In the second place, if we compare the brief analyses of these categories of ought, we find that they do indeed have something in common. In all categories the ought is found to designate some procedure that is calculated to prevent, to reduce, or to eliminate *distress*. The prescribed acts or avoidances are all directed toward the resolution of doubt, the correction of incompleteness, the decrease of esthetic annoyance, the amelioration of social ills, the prevention of lamentable waste in materials or labor, the escape from pangs of conscience, the reduction of illness and social failure, the avoidance of chagrin over social impropriety, relief from the violation of our sense of justice, and escape from legal entanglement.

In one way all of the oughts are grounded in *utility*. They are not arbitrary, not really dictatorial, however coercive. Their coerciveness is grounded in the nature of reality, and their utility is in each case that of offering an escape from one or another misery.

If this be true of all human behavior, as we have intimated, we need to survey more carefully the springs of action in general, and we are led directly to the topic of *motivation*. It may be that such a survey will react in turn upon our understanding of such fields as logic, esthetics, ethics, social welfare, convention, and even perhaps of the nature of justice and equity, and the aims of legislation.

It is to be noted also that, in common language, fulfillment of the imperative in all these categories is described as "good." There has been, historically, a long and argumentative search for the correct description of the Good. Since before Socrates down at least to John Dewey this debate has gone on. It may be instructive to observe that in so far as our various categories are really different, there are correspondingly different varieties of "good."

A syllogism with a valid conclusion is commonly called a "good syllogism," a good argument; a Gestalt that is complete and stable is called a "good figure"; arrangements that satisfy esthetic canons are called in "good taste"; to contribute to social

welfare is called "doing good"; an axe with the proper handle is called a "good axe" and there are "good" and "bad" times to plant potatoes; ethical or religious behavior is that of the "good man"; hygiene proposes certain things as "good for us"; observance of the conventional proprieties is called "good manners"; while a fair administrator is said to be a "good judge."

Indeed, the various uses of the term *good* are by no means exhausted by our nine or ten categories. But it is clear enough that in each of them there is something that has called forth this adjective, and the discovery of whatever elements they may have in common may well enough serve to throw some light on the nature of the good, wherever it is found. Of course words are only convenient tools, and it would be a mistake to bank too much on a study of word usage. Nevertheless, it is not without some reason that the same word comes commonly to be used for what appears to be a diversity of relationships. In the present connections the word *right* has the same broad applications as does the word *good*.

It may be objected by some that it is a mistake for us to include all these varieties of imperative under the term *moral*, as we shall continue to do in the remainder of this volume. If some persons insist on reserving the word *moral* for such imperatives as those of duty, social welfare, justice, and the like, we object that this is their mistake. Actually the term *morality* has to do with those things that are good and right, and with those things that are bad and wrong. We find that such words as *good* and *right* are commonly used for all of the imperatives here considered. In fact the emphasis on this extension of the word *moral* to the range of things that really belong to it is one of the essential characteristics of the viewpoint here to be presented. At a later point we shall advocate familiarity with this extension as one of the important steps in moral training.

Analytically considered, the relationship between ethics and psychology might be considered in either of two ways. We might ask how the various classical systems of ethics fit in with the accounts of human nature now accepted as most adequate. In this way one might estimate the validity of those systems of ethics. Or we might start out with such an ethical account as

our list of categories provides and inquire how various current systems of psychology account for the nature and genesis of these forms of obligation. In this way we might secure some basis for estimating the validity of the current psychological systems. It is this second method of relating the two topics that will soon occupy us, when we inquire what account current systems of psychology offer of the nature of imperative conduct and of the sense of obligation. But first a method proposed for the measurement of individual differences in ethical or moral insight.

CHAPTER 2

THE MEASUREMENT OF ETHICAL INSIGHT

What seems good to one seems bad to another;
what seems well ordered to one seems confused to
another; what is pleasing to one displeases an-
other.—SPINOZA.

Usefulness of an Ethical Test

In the foregoing chapter the chief meanings of obligation have been described—the varieties of ought, the principal imperative categories. Appreciation of these categories and recognition of them in relation to particular statements of obligation require a certain kind of ethical insight. To perceive that a given expression or statement of obligation arises on a logical rather than an esthetic basis, for example, assists in understanding the nature and true meaning of such an imperative. Insight into the grounds on which an obligation is based is at least one aspect of ethical perception, no matter what may be the relation between ethical perception and approved behavior.

The degree of such understanding, if it differs among individuals, ought to be measurable. If such measures were available they would facilitate the study of ethical development and the comparison of persons of different age, intelligence, and education. Such measures might be found to reflect the need or the influence of moral training and the effects of cultural experience.

Such measures of insight would not necessarily exhaust the ethical differences between individuals. There would still be such questions as whether an individual's actual conduct conforms to the degree of his understanding. There might well be differences in habit and in scale of value dependent on early

training, on cultural background, on personal interests. But even such differences as these might betray themselves in the measure of insight. We have therefore devised and tried out experimentally a number of different ways of securing quantitative measures of ethical insight.

There will be given here only the final form of these tests, and a procedure which comparative study has shown to be the best of those we have devised. Tentative standards or norms will also be given for various groups, so that a score made in the test may be compared with a reasonably large number of such scores from persons of similar age, education, intelligence, and cultural status. As work with this test or scale continues larger numbers of scores will accumulate, thus extending the range of application of the test and increasing its reliability.

An Ethical Insight Test

The test is constructed on the following plan. A sheet is provided containing fifty statements or propositions, in each of which the word *ought* occurs. These statements were chosen from an original longer list used in our preliminary experiments conducted to ascertain how many fundamental categories of obligation need to be recognized.

A second sheet, headed "Instructions," gives the names of each of the ten categories described in the preceding chapter. The key letter for each category is also given to simplify the recording of the observer's judgments. In each case there is a brief description of the nature of the obligation. There is also given for each category a sample or illustrative statement, which is not one of those on the test sheet.

The person to be tested (called the observer, subject, or judge) first reads the instruction sheet and becomes acquainted with the variety of categories. In doing the test he is allowed to make as frequent reference to the instruction sheet as he may desire. We thus provide the observer with a list of the categories, rather than requiring him to devise a list of his own.

The instructions tell the observer to turn to the test sheet and examine the fifty statements there given. In front of each statement he is to place the key letter (or letters) showing to which category (or categories) the statement belongs. No time limit is set, but the time used varies from fifteen to forty-five minutes in the case of the observers we have used. The instruction sheet and the test sheet are here reproduced.

Two different test sheets are available, Form O and Form R. Experiment shows them to be equally difficult, so that the same standards apply to both, if each is scored with its proper key. The two forms differ in the following ways. In Form O there are a good many ambiguous or equivocal propositions, for which either of two or more answers might be considered correct; for about half of the items two answers are given in the key and either answer may be scored correct. In Form R, on the other hand, the propositions are more severely scored, and a great many new propositions have been used in order to carry out this plan. Except for one item there is but one correct answer; this is the answer given by the majority of a group of twenty highly qualified experts.

Furthermore, in Form O not all the categories were equally represented; in Form R this equality has been almost completely achieved so that there are five examples of each of the ten chief categories. The single exception is Item 5 which may be correctly answered as either *U* or *W*. Each of these forms has certain advantages and disadvantages, and a discussion of these points may be found in Appendix 3. But for the general purpose of measuring the insight of individuals and comparing individual scores, either form may be used (with the appropriate key) and scores made on one form may be compared directly with those made on the other. Form O, the original, was the first used, and most of the comparisons of a qualitative kind reported in this chapter are based on the use of that form.

The introductory remarks used to explain the test, Forms O and R, and the scoring keys for the two forms are given on the following pages.

INTRODUCTORY REMARKS

(To be made by the Examiner)

We are making a study of the meaning of *ought*—spelled O-U-G-H-T. We wish to compare your judgments with those of other persons, in other schools and in other grades. When the results are completed your teacher will be provided with a list of scores so that if you wish you can see how your own results compare with those of others.

In what you do here, speed is not the important thing; the important thing is to be *correct*. That is all that will count in the score. Take all the time you need, within the limits set apart by your school for this exercise. Most persons take about twenty to thirty minutes to mark all the statements.

All the information you need is given on the INSTRUCTIONS sheet. Study this carefully before you begin, and consult it as much as you like afterwards; you do not need to memorize anything.

If the INSTRUCTIONS are not clear, ask the Examiner about them. But no questions should be asked about the statements on the Test Sheet. After all the papers have been completed and collected there may be free discussion about anything in the test if the Teacher or the Examiner finds that there is time for this.

Try to do all the items on the Test Sheet, for all those that you omit will have to be scored as WRONG. Your score will be the total number you do CORRECTLY.

Be sure to write your name, age, and school grade at the top of the Test Sheet but do not write anything on the Instructions Sheet.

INSTRUCTIONS

On this sheet are given several varieties of OUGHT or kinds of obligation. Each is indicated by a capital letter, by a brief description, and by a sample proposition. Read this list carefully.

Now take the second sheet. On it are fifty propositions, all containing the word *ought*. In front of each proposition put the capital letter showing to which variety or category of OUGHT that proposition belongs. The description and sample on the Instruction Sheet may be referred to for guidance. If you need to, you may put more than one letter before a proposition, but in that case draw a line under the letter that you think fits best.

We do not care whether or not a statement is true, but only to what category it would belong, if anyone should make it.

CATEGORIES

- B — BEAUTY.** (Esthetic sense or personal taste prefers it.)
 "This green hat ought not to have a blue ribbon on it."
- C — CUSTOM.** (Conventional propriety, etiquette, or custom requires it.)
 "Those in mourning ought to wear black."
- D — DUTY.** (Religious scruples, conscience, or ideals are involved.)
 "Children ought to honor and obey their parents."
- G — COMPLETENESS.** (Some occasion, situation, or pattern calls for it.)
 "Such music ought really to be played on a pipe organ."
- I — INFERENCE.** (Certain premises or facts lead logically to it.)
 "The morning is clear; we ought to have a fine day."
- J — JUSTICE.** (Fairness and equity demand that this be.)
 "Teachers ought to be willing to work for small salaries."
- L — LAW.** (Legislation, police rules, or statutes require this.)
 "If you carry a pistol you ought to have a police permit."
- S — SAFETY.** (For the hygiene, success, or well-being of the individual.)
 "There ought to be a guard rail on your stairs."
- U — UTILITY.** (Expediency, usefulness, or efficiency is the reason.)
 "You ought to cover these bulbs before cold weather."
- W — WELFARE.** (To make the world better for people in general.)
 "Persons who are closely related ought not to marry."

FORM O

INDICATE BY A CAPITAL LETTER THE CATEGORY TO WHICH
 EACH OF THE OUGHTS BELONGS:

1. We won the game and we ought to celebrate.
2. That picture ought to have a wider frame.
3. Every man ought to have a chance to work for his livelihood.
4. A room like this ought to be painted a lighter color.
5. In making introductions the younger person ought to be presented to the older.
6. To vote in November you ought to be over twenty-one years of age.
7. Everyone ought to keep his promises.
8. Capital punishment ought to be abolished.
9. This pudding ought to have more sugar in it.

10. One ought to be careful in the choice of friends.
11. You ought not to labor on the Sabbath day.
12. Those driving cars on public roads ought to have drivers' licenses.
13. You ought not to dive with your eyes shut.
14. Real estate owners ought to be responsible for taxes assessed against their property.
15. The wedding ring ought to be worn on the third finger of the left hand.
16. The school term ought to be longer than it is.
17. If Tuesday was Christmas this ought to be New Year's Day.
18. Stripes in a fat man's suit ought not to be horizontal.
19. Some cure for that disease ought to be discovered.
20. Income tax ought to take into account a man's age and obligations.
21. A man like that ought to be whipped.
22. Defective vision ought to be detected at an early age.
23. Every dog ought to be entitled to two bites.
24. The average room temperature ought to be about sixty-eight degrees.
25. The fish ought to bite well this morning.
26. Women and men ought to receive the same pay.
27. One ought not to take revenge into his own hands.
28. A fur coat ought to cost more than a woolen one.
29. According to traffic signs cars on this road ought not to go over twenty-five miles an hour.
30. Every family ought to live within its income.
31. Persons who are going to be married in New York ought to secure a marriage license from the proper authorities.
32. That black cover ought to have a gold border.
33. You ought to wear heavier clothing in the winter.
34. The strong ought to bear the infirmities of the weak.
35. We ought to catch the bus if we take this short-cut.
36. A man ought to tell the truth regardless of consequences.
37. This knife ought to be sharpened.
38. This axe ought to have a longer handle.
39. The garden soil ought to be cultivated often but not too deep.
40. Arithmetic ought to precede algebra.
41. Garden peas ought to be soaked thoroughly before planting.
42. You ought to have your hair cut.
43. A bucksaw ought to be loosened up a little when not being used.
44. Individuals ought to mate with those whose traits are similar to their own.

45. When walking with a lady a man ought to take the outside next to the curb.
46. You ought to have seen him make a fool of himself.
47. Where there is so much smoke there ought to be some fire.
48. With a full-dress suit a man ought to wear a white tie.
49. A good classification ought to provide for all the actual cases.
50. In America a driver ought to keep to the right side of the road.

SCORING KEY, FORM O

(Giving for each statement the answer or answers to be considered correct.)

1. G, I, C	18. B	35. I
2. B, G	19. W	36. D
3. J, W	20. J	37. U
4. B, G	21. G, J	38. U
5. C, D	22. S	39. U
6. L	23. J	40. G, U, I
7. D, W	24. S, W	41. U
8. W, D	25. I	42. B, C
9. B	26. J	43. U
10. D, S	27. D, W	44. W, S
11. D, C	28. I	45. C, S
12. L, W	29. L	46. G
13. S	30. U, W	47. I, G
14. L, J	31. L	48. C
15. C	32. B, G	49. G, U
16. U, W	33. S, U	50. L, C
17. I	34. D, W, J	

FORM R

NAME _____ Where are you in school? _____

Grades College
Your age? _____ 4 5 6 7 8 9 10 11 12 Fr. Soph. Jr. Sr.

INDICATE BY A CAPITAL LETTER THE CATEGORY TO WHICH
EACH OF THE OUGHTS BELONGS:

1. The guest of honor ought to be seated at the host's right.
2. That picture ought to have a wider frame.

3. If Tuesday was Christmas this ought to be New Year's Day.
4. Men and women ought to receive the same pay for the same work.
5. Every family ought to live within its income.
6. One ought to be careful in the choice of friends.
7. A room like this ought to be painted a lighter color.
8. To vote in November you ought to be at least twenty-one years of age.
9. This knife ought to be sharpened.
10. The fish ought to bite well this morning.
11. In making introductions the younger person ought to be presented to the older.
12. Every dog ought to be entitled to two bites.
13. You ought not to dive with your eyes shut.
14. We ought to round out this vacation with a side trip to Grand Canyon.
15. Individuals ought to mate with those whose traits are similar to their own.
16. Every one ought to keep his promises.
17. This pudding ought to have more sugar in it.
18. A boy with a disposition like that ought to be named Percy.
19. This axe ought to have a longer handle.
20. Those driving cars on public roads ought to have drivers' licenses.
21. The wedding ring ought to be worn on the third finger of the left hand.
22. You ought to live in a climate like that of Arizona.
23. Some cure for that disease ought to be discovered.
24. A fur coat ought to cost more than a woolen one.
25. A man like that ought to be whipped.
26. According to traffic signs cars on this road ought not to go over twenty-five miles per hour.
27. The strong ought to bear the infirmities of the weak.
28. An illuminated pageant on the water ought to include fireworks.
29. One ought to have a hobby as well as a main occupation.
30. We ought to catch the bus if we take this short-cut.
31. We won the game and now we ought to celebrate our victory.
32. With a full-dress suit a man ought to wear a white tie.
33. Garden soil ought to be cultivated often but not too deep.
34. Income tax ought to take into account a man's age and obligation.
35. Stripes in a fat man's suit ought not to be horizontal.
36. We ought to do unto others as we would that they should do unto us.

37. Feeble minded and insane ought to be prevented from reproducing.
38. You ought to have seen him make a fool of himself.
39. Persons who are going to be married in New York ought to secure a marriage license.
40. Peas ought to be soaked thoroughly before planting.
41. We ought to render unto Caesar the things that are Caesar's.
42. A man ought to tip his hat when meeting a lady of his acquaintance.
43. A man ought to tell the truth regardless of consequences.
44. A bucksaw ought to be loosened up when not in use.
45. Where there is so much smoke there ought to be some fire.
46. A person ought to forgive those who trespass against him.
47. That black cover ought to have a gold border.
48. Estimated income tax for the year ought to be reported by March 15.
49. Everyone ought to sleep at least eight hours a day.
50. Ability to read and write ought to be required of all voters.

SCORING KEY, FORM R

Score 2 points for each correct answer. All omissions are scored as incorrect. Final score is total number of points credit, the maximum being 100. If two answers are given, count the one that is *underlined* (see Instructions).

1. C	18. G	35. B
2. B	19. U	36. D
3. I	20. L	37. W
4. J	21. C	38. G
5. W, U	22. S	39. L
6. S	23. W	40. U
7. B	24. I	41. J
8. L	25. J	42. C
9. U	26. L	43. D
10. I	27. D	44. U
11. C	28. G	45. I
12. J	29. S	46. D
13. S	30. I	47. B
14. G	31. G	48. L
15. W	32. C	49. S
16. D	33. U	50. W
17. B	34. J	

Scoring the Test

A key is provided, showing the classifications of each of the statements on the test sheet made by the majority, or by pluralities, or by considerable numbers, of a group of fifty well-qualified judges, who are used as the standard of correctness in scoring the test. So far as possible only one answer is considered correct, but the judges disagree sufficiently so that few of the decisions are unanimous. In most cases there is however a distinct majority. In other cases it is necessary to recognize two or more correct answers. The observer is called correct if he gives one of these as his best answer.

We have used the simplest possible method of scoring and our standards are of course meaningful only when this method of scoring is used. Each correct statement in the list of fifty is given a value of two points, making the best possible score 100 points. No partial credits are given—a statement receives either two points or no credit. Since only correct statements are counted, omissions count as wrong. If the subject gives more than one category, the one underlined (see Instruction Sheet) is counted as the answer for purposes of scoring his work sheet.

Interpreting the Scores

When the total number of points constituting an individual score has been determined, it may be given a more concrete meaning by showing where such a score would stand in a large collection of scores from persons of the subject's age, education, etc. Such a collection of scores is called a table of norms or standards. The accumulation of a variety of such tables of norms suitable for the interpretation of any individual score is a large task. Much more work needs to be done in this direction to give the test a wider range of applicability and greater precision and dependability. If possible such scores should be correlated with measures of other characteristics, such as intelligence tests, conduct records, history of delinquency, tests for temperamental traits, indices of emotionality, and so on. In this

way the relationship between ethical insight, as here measured, and other aspects of personality may become known.

A table of tentative standards is given which will make it possible to interpret in a useful way the scores achieved by individuals belonging to certain specified groups, classified chiefly on the basis of age and educational status.

1. **GRADE SCHOOL.** The test in its present form is apparently unsuitable for use below the educational level of the sixth grade. For one thing some of the words (e.g., *abolished*, *horizontal*) are not familiar to all children in the grades below this level. In the groups tested, just completing the sixth grade and ready for the seventh, one fourth of the scores are below 25. This is so close to a chance score of 10 as to suggest that failure would be the characteristic response of lower grades. Scores on this educational level are available from 138 children, boys and girls, ranging in age from eleven to fourteen years.

For this sixth to seventh grade group the lowest score is 12 and the highest 66. The median score is 34—that is, half the scores are better and half poorer than this. Each of these halves, upper and lower, may in turn be subdivided into halves, thus giving four quartiles. If the scores of 100 typical individuals were ranked in order from lowest to highest and the lowest were called number 1, then numbers 25, 50, and 75 would represent the division points of these quartiles.

The highest 5 per cent of scores may be called Excellent, and the remaining scores of the highest quartile called Good. Scores in the second quartile from the top may be called High Average and those in the next lower quartile Low Average. The lowest 5 per cent of the scores might be called Failure and the remaining scores in this lowest quartile would be Poor.

2. **HIGH SCHOOL.** The standards available for high school students are from the scores of 100 individuals in the tenth grade, in two different schools, one rural and one a highly selected urban school group. The ages are in the main sixteen and seventeen years. But in this total group there are a very few cases from the ninth and eleventh grades, and as for age there are a few as young as fifteen or as old as eighteen.

The lowest score is 30 and the highest 88; the median score is 62. These 100 cases may be divided into quartiles as in the case of the grade school observers, and values assigned as follows for the purpose of interpretation:

Best	5%	Over 84	Excellent
Next	20%	74 to 84	Good
Next	25%	64 to 72	High Average
Next	25%	52 to 62	Low Average
Next	20%	42 to 50	Poor
Lowest	5%	Below 42	Failure

On this basis, for example, a score of 66 would have the value of High Average. A score of 72 would have the very best High Average value and would stand at the seventy-fifth centile, that is would be number 75 if the 100 cases were ranked in order from low to high. Only twenty-five scores in the group (the highest quartile) would be better than this.

3. COLLEGE. The scores representing college students are from all four classes (freshmen, sophomores, juniors, seniors) in a college with highly selected students, ranging in age in the main from eighteen to twenty-two years. There were 278 cases in this group. The lowest and the highest scores are 54 and 98, respectively, the median being 82. The medians and the distributions of scores are the same for all four college classes; upperclassmen (seniors, juniors) do no better than lowerclassmen (sophomores, freshmen). There is no evidence that college training, in a liberal arts course, does anything to improve the ability to do the kind of thing that is required in this ethical insight test. In fact twenty philosophical and scientific experts gave a median score only four points better than that of the college students of all classes.

Since the scores are of course fairly high, there is less room for improvement than lower down in the school grades; nevertheless a median score of 82 means nine wrong items on the average, leaving plenty of opportunity for improvement if there is to be any. The failure of the college scores to increase with more advanced standing is very significant from the point of view of moral instruction. Not only does it mean that general

education is ineffective in promoting insight of this kind; it means also that the maximum is almost reached before college age, that is before eighteen. Anything that may be undertaken to improve such scores as these must therefore be undertaken at least not later than high school years.

There is of course some overlapping between the high school and the college scores, although this is not great. Only two individuals in the college group fall below the high school median. Only four high school students score above the college median.

For purposes of interpretation the college scores may be divided into subgroups, as in the foregoing instances. The results are given in a summary tabulation below. For some purposes it may be useful to use letter grades instead of such terms as Excellent, Poor, etc. In such cases equivalents may be used as shown in the following:

X	for Excellent
A	for Good
B	for High Average
C	for Low Average
D	for Poor
F	for Failure

4. PRESENT STANDARDS. These standards, representing the best data now available for various age and educational groups, are summarized in the following tabulation, which will serve conveniently for the evaluation of scores from individuals belonging to any of these groups.

In the following table the standards for the school grades and for high school represent results from the public school population of a typical Eastern city and its suburbs. In schools comprising pupils carefully selected for general ability, or pupils coming from exceptionally favored economic and social groups, the standards or scores may be expected to range on a higher level. Thus scores were secured with the revised form from the fifth, sixth, and seventh grades of a famous private school for girls in New York City, with the following results.

Score Group	Scores			
	<i>Grades 6-7</i>	<i>High School</i>	<i>College</i>	<i>Experts</i>
Best 5 per cent (X or Excellent)	Over 58	Over 84	Over 92	Over 98
Next 20 per cent (A or Good)	40 to 58	74 to 84	88 to 92	94 to 98
Next 25 per cent (B or High Average)	36 to 38	64 to 72	82 to 86	88 to 92
Next 25 per cent (C or Low Average)	26 to 34	52 to 62	76 to 80	82 to 86
Next 20 per cent (D or Poor)	18 to 24	42 to 50	68 to 74	74 to 80
Lowest 5 per cent (F or Failure)	Below 18	Below 42	Below 68	Below 74

Although in the public school grades the fifth grade median score appeared to be near to chance, in this school the fifth grade had a median score of 52; the sixth grade scores had a median of 60; the seventh grade median was 66. That is to say, children in comparable grades in this school made scores lying mainly in the upper quartile of the standards for public school pupils. Their scores, in fact, closely approximated those here given for tenth grade high school pupils. In such cases the general table of standards may be used to reveal the generally high records made by the children in such a special school. But further information concerning the individual differences among the pupils may be secured by comparing the individual scores with the average score of the group to which those individuals belong.

In the case just cited too much should not be made of the unusually high level of the scores, since the standard instructions were not closely followed. The examiner reports: "I tried to eliminate the factor of reading ability by defining the troublesome words. . . . For the fifth and sixth grades I had to invent two or three sample questions, set up just like the actual test, before they grasped the idea."

Since these deviations from the standard instructions were the same for all members of this group of children, the individual scores in this group may instructively enough be compared one with another. But such scores cannot be interpreted according to the general standards nor according to the curve of development here presented. This is of course no peculiarity of the present material; the same thing is true in the use of any standardized test. Spontaneous deviations in the instructions may be expected to result in scores that do not follow the typical pattern.

The Curve of Development

It would be desirable in constructing the developmental curve showing the growth of ethical insight as measured by such a test to have records from typical groups differing primarily in age. It would be still better of course to have repeated measurements on the same individuals throughout the period of their development, but such data are seldom available for any type of psychological measurement.

We have in our various groups of observers individuals ranging from eleven to twenty-one or more years of age. But few of these are representative of their age groups. For example we have in the tenth grade group, who are in the main sixteen and seventeen years old, individuals as young as 15 and as old as 18. But the fifteen-year-olds, being advanced for their age, and the eighteen-year-olds, being retarded for their age, do not fairly represent other individuals of those ages.

Since our observers were selected on a school grade basis, the nearest we can come to outlining a developmental curve is by representing the medians of our main groups as points on an educational development curve. So far as age is concerned such a set of points would show only the standing of typical sixth-seventh grade (normal ages twelve and thirteen), typical tenth grade (normal ages fifteen and sixteen) and typical college students (ages around twenty).

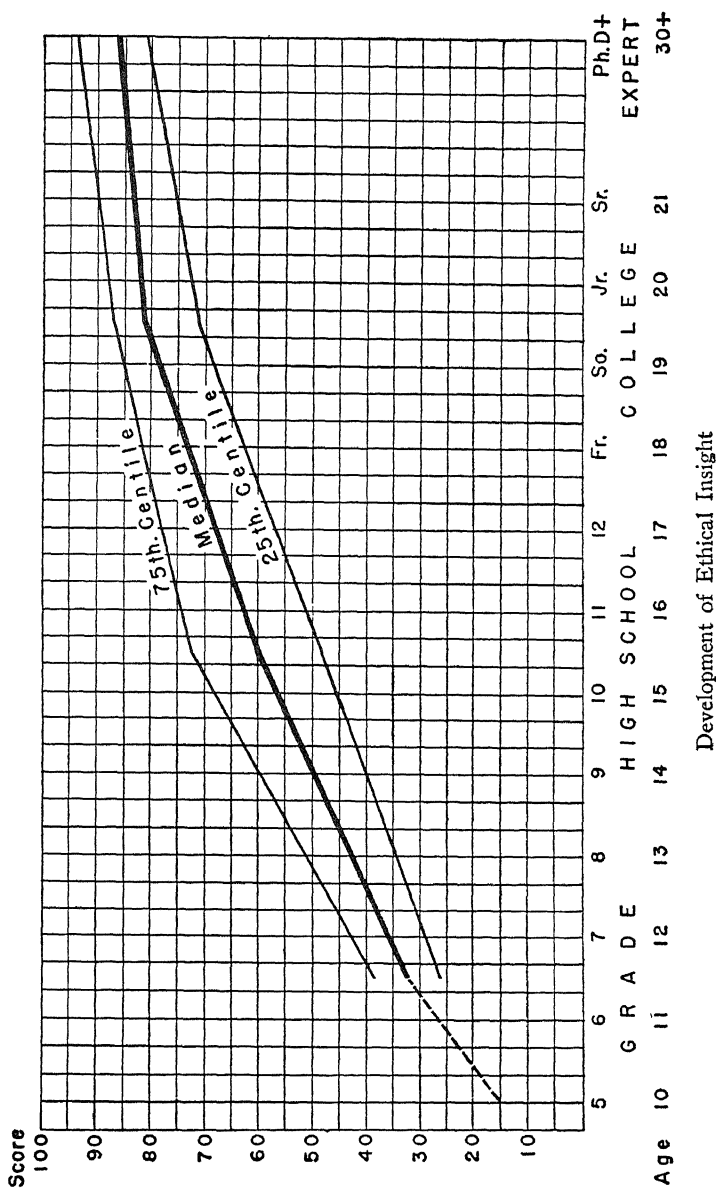
Connecting these points yields however a curve of change, and interpolating values between the points actually measured

gives some approximation to the scores that would be expected from individuals of other grades. Such a curve is shown in the diagram on page 41.

There are really three curves presented in the diagram and a word of explanation is required in this connection. The heavy middle curve represents the median. This shows the average or normal to be expected on the various educational levels. But the twenty-fifth and seventy-fifth centiles are also shown, in two other curves, which are more lightly drawn. Between these two points one half of the cases will lie; thus half of the tenth grade scores will lie between 50 (the twenty-fifth centile) and 72 (the seventy-fifth centile), the median being at 62. One quarter of the scores will be better than that shown by the seventy-fifth centile; one quarter of them will be poorer than the score shown by the twenty-fifth centile. The diagram of three curves thus shows not only the median score at each level but also indicates the way in which a group of scores on that level may be expected to be distributed above and below this normal.

The vertical scale represents the range of scores, from 0 to a possible 100 points. On the base line are represented the educational years ranging from the fifth grade to adult experts. The approximate ages on these levels are also indicated, but our results apply directly to educational levels, not to ages. (The age norms apply only to individuals who at given ages are on the indicated educational levels.) The extension backward of the earlier part of the curve is hypothetical but is suggested by such results as the frequency of chance scores on the sixth-seventh grade level.

The curve rises rather sharply from the earlier grades to the tenth, then more slowly for the remainder of its course. It has practically flattened out by the time college students are reached, indicating that little or no improvement of average score with educational level is to be expected after this point. The "Expert" score was the average made by a group of twenty specialists in philosophy, science, and education, professionally engaged in teaching and research, using Form R. The score is directly comparable with those for the other groups and is only four points higher than that of the college group.



Interpolations and extrapolations may be made from the curve with considerable suggestiveness and with reasonable confidence. Thus a score of 46 might be expected as the median of eighth grade pupils; a score close to 75 would be expected from college freshmen; and so on.

In this way any score from a person eleven to twenty-one years of age might be converted into a developmental or grade level equivalent, providing that score is at least as high as 30, which is indicated for sixth grade pupils just beginning work on that level. Such an equivalent might conveniently be designated an ethical insight index, comparable to the mental age measures derived from the use of intelligence tests and the educational age measures yielded by objective subject matter examinations.

A brief example will illustrate the way in which such equivalents are provided by this table of standards. Suppose an individual is known to have an ethical insight score of 40. Run up the scale of scores on the left of the table until 40 is reached. Then go horizontally across the table on that line until it crosses the curve of development. Then look directly below this point of crossing, at the educational level scale, to see at what level the score is typical. A score of 40 is found in this way to be characteristic of children in the latter half of the seventh grade.

To have an ethical insight score of 40 therefore means to resemble in this respect children between the ages of twelve and thirteen who are about half way through the seventh grade. Now if such a score is made by a child of eleven, we know that he is much in advance of his age in this respect. If the score is instead made by a person of fifteen, we know that such a person is an ethical laggard, for such children are on the average found in the tenth grade with scores of nearly 60.

It will be seen therefore that although we have experimentally determined only four points on the developmental curve, the method of cautious interpolation gives very instructive information about other groups and individuals than those we have actually measured. Of course it would still be desirable to have actual measurement of educational levels other than those we have studied up to this time. Special factors sometimes give unexpected results at one point or another in a develop-

mental curve. There might for example be a rather sudden rise between the twelfth grade and college freshmen, because only certain more or less selected high school graduates actually continue on into college.

Practical Applications

Can such a test as this be useful only for the study of groups for whom standard norms have already been established by other investigators? Psychometrists have in recent years made such a fetish of the availability of standard norms that a few words must be said here on that point. The importance of having norms from large and randomly chosen populations can easily be exaggerated. There are of course advantages to more or less absolute measures, for with them comparisons of wider range are possible. But often enough such comparisons are of little or no use. Relative scores in a test can be put to good use, scores derived by the comparison of the individuals comprising that very group. Thus in purchasing uniforms or shoes for an institution it is more important simply to know the comparative sizes of the local inmates, and their frequencies, than to know how the population of this institution compares with that of other institutions or with the population at large. In selecting candidates for admission to a particular college it may be enough to know merely how a given candidate compares with the relatively small number of students already in that college. It is this in fact that will determine the candidate's local success or failure.

It is particularly when only a single score is in question that comparison with *some* population is needed. But any teacher, group leader, or counselor can, in securing scores from the members of some immediate class or group, derive a useful set of norms without reference to other populations. The class can be divided into upper and lower halves or into quartiles, or the scores may be arranged in rank order, and such terms as Excellent, Good, Fair, and Poor applied to such divisions. Individual characteristics will then be shown, relatively, by the status of given scores in their own group. Weakness can thus

be diagnosed; differences correlated with those of age, education, intelligence, or special training can be estimated. All this can be done *within the group studied*, with no concern whatever for the scores made by other groups in other parts of the world, or by the members of the draft army, or by all the children or adults in a given region.

Consider the following by way of a concrete example. A counselor is making a study of twelve eighth grade children who are under his guidance. In the test of ethical insight their scores are 30, 42, 48, 54, 60, 62, 62, 66, 70, 70, 84, 86. No standards are available for eighth grade children; but does that make the scores useless? They range from 30 to 86 and their median is 62. In these respects the small group gives scores similar to those of high school children. The counselor may congratulate himself on working with so well endowed a group. But a good counselor would waste little time on self-congratulation. What else could he do?

He would notice at once that the higher scores in his group are about twice as good as the lower scores. How are these high scores to be accounted for? And what explains the very low scores? How do these scores compare with the deportment, the intelligence records, the school grades, the history of delinquency of the various children? With which categories do the poor ones have most difficulty? Do they depend overmuch on some categories, appearing unfamiliar with others? What seems to be back of their confused ethical perception? What kind of discussion and variety of instruction might serve to bring the insight of these low-scoring children up to par for the class? In spite of the lack of norms for eighth grade children, such a study of the scores of a small group affords many useful suggestions to the teacher or counselor interested in moral instruction. Giving the test again after special instruction has been given, or after some particular experience, such as a discussion or a motion picture, may throw some light also on any changes that may have taken place in the judgments of the individuals in the group.

Children below the high school level may be expected to show undue use of the categories Safety, Legislation, and

Custom and to neglect particularly Utility and Inference. High school pupils will continue to overuse Custom, but they will lean more heavily than younger pupils on Inference, Beauty, and Utility. The category of Social Welfare tends to be relatively neglected by all groups. Completeness is represented on the test sheet of Form O by too few examples and Utility by too many. These imperfections in the material may be reflected in the frequency with which these two categories are employed by any experimental group.

Such comparison of category preferences may be full of suggestions for those interested in the management and guidance of the young. Generalizing these comparisons leads to such conclusions as the following:

Children in the lower grades most fully recognize Safety, Custom, and Law as the adequate basis of obligations. In high school children of modest endowment, Custom remains important but Justice displaces Law and Beauty is substituted for Safety. More highly selected high school pupils and also college students continue to recognize the claim of Beauty, but the relatively blind dictates of Justice and Custom are subordinated to such rational criteria as Utility and logical Inference. There is in this progression something significantly related to the evolution of moral perception, not only in the individual but also in the history of thought.

Typical Results

A few general statements may be made here concerning the nature of some of the results from the groups of observers whose records are now at hand. Individuals of the same age, sex, and education are found to give strikingly different ethical insight scores. Thus tenth grade high school pupils give scores as low as 30 and as high as 86. Chance marking of the statements, assigning the key letters at random, would give on the average a score of 10. There are ten categories and therefore one chance out of ten of being right in the case of each statement. These high school pupils therefore give scores ranging from practically 0 (a chance score) to nearly perfect. College

students scatter over a range of nearly 45 points—from 54 to 98 in the cases we have tested. For those interested in ethical matters such individual differences in insight scores are of great importance, and it will be of interest to ascertain the factors which are responsible for them, as well as the factors which are correlated with them.

Within the groups tested up to this time, age alone makes very little difference. In these groups, also, boys and girls do not appear to differ in any consistent way. The more intelligent individuals in a given age or educational group make on the average higher scores. But persons with very similar intelligence test scores yet show widely differing scores on the ethical insight test. General or verbal intelligence is evidently in part but by no means wholly responsible for the individual differences in insight scores. Of course intelligence plays a role in any test that makes use of verbal instructions or involves the use of abstract terms.

A Few Qualitative Examples

The nature and degree of the differences in ethical insight revealed by the range of test scores appears clearly when a qualitative examination is made of the responses of individuals. A similar exhibition results when a survey is made of the range of categories ascribed to a single statement by the individual members of an experimental group. Consider first the responses of a few college students.

Here for example is one who thinks that the imperatives that dictate the color of a room, the length of the school term, the sequence of arithmetic and algebra, and the mating of similars all belong together under the category of Justice. Wearing the wedding ring on the conventional finger she classifies under Beauty; loosening an unused bucksaw belongs under Safety; the requirement of fire where there is so much smoke is a matter of Welfare; telling the truth regardless of consequences is classified as Custom. What kind or degree of moral understanding is to be expected of such a person? But she is only one of many.

Another student thinks that a longer school term and allowing a dog two bites are matters of Safety, while wearing heavier clothing in the winter and being careful in the choice of friends are for her matters of logical necessity (Inference).

Here is a girl who thinks that "You ought to have seen him make a fool of himself" is an ethical Duty, along with keeping promises and not working on Sunday. She puts propositions 17, 25, and 28 (Form O) quite properly under Inference, but along with them go "You ought not to dive with your eyes shut" and "This knife ought to be sharpened." And she puts needing a haircut under the category of Safety, along with wearing heavier clothing in the winter.

Another student puts propositions 39, 40, 41, 43 of Form O under Utility, where they belong, but with them she puts:

The strong ought to bear the infirmities of the weak.

A fur coat ought to cost more than a woolen one.

We ought to catch the bus if we take this short cut.

One astonishing judge thinks that esthetic taste (Beauty) is what should determine the length of the school term, the occurrence of New Year's a week after Christmas, and the presence of fire where there is much smoke.

Under this same category of esthetic preference another puts propositions 37, 38, 41, and 43 of Form O which have to do with a knife that needs sharpening, the length of an axe handle, soaking garden peas before planting them, and loosening up an unused bucksaw!

Again, under the category of esthetics another places the imperatives dealing with length of the school term, cost of a fur coat, using a short cut to catch a bus, and the rule that a classification should provide for all the cases.

Fortunately such foolish classifications do not represent the general run of the papers, so that these examples are not to be construed as another exposure of the general ignorance of college students and graduates. As we have seen, the average judge in our groups puts three fourths or more of the propositions under the correct headings. But that so many advanced college students lack insight into these varieties of obli-

gation will to many people be surprising, and perhaps ominous. Would improved ethical training change such results?

Nor are such errors to be excused by the fact that sometimes one can see what lies behind them. Something always lies behind a boner, but usually it is plain ignorance. Ignorance, in this case, is lack of moral judgment, weak insight, clouded perception of the motives of conduct.

The clearest exhibition of lack of insight, as we have shown in the case of college students, appears when the classifications of single individuals are examined. But a similar picture may be drawn by noting the group judgments on single statements. In the case of these consolidated high school students the group gives on many of the propositions a closely concentrated judgment, similar to that of our sophisticated judges. But even then a few striking departures from the consensus betray either a curious perversion of understanding or else pure guessing. In other cases there is a wide scatter of judgments and a dozen of the propositions have at least eight of the ten categories assigned to them by one or more individuals. A few examples will suffice to show the wide discrepancies and failures of insight.

A good majority see that the younger are introduced to the older as a matter of convention; but nearly a third of the group put this ought on a Duty basis; Justice, Welfare, and Completeness (Gestalt) are other categories represented.

Nearly all put not diving with the eyes shut in a Safety category; but at least four of the group see in it ethical, logical, or legislative obligations.

It might be argued whether the occurrence of New Year's a week after Christmas is a matter of convention or of inference; both conclusions are well represented. But six base it on Completeness and two on Utility, while Duty and Welfare are other categories cited.

The avoidance of horizontal stripes by fat men is overwhelmingly declared to be a matter of esthetics; but Safety and Utility are also ascribed to this obligation, as well as Gestalt, Inference, and Convention.

That this is the kind of morning on which fish are hungry

is put by a big majority under Inference, where it belongs. But a fourth of the judges dissent, preferring such categories as Beauty, Custom, Duty, Completeness, and Utility.

Nearly all the categories are cited as reasons why a fur coat ought to cost more than a woolen one, and why the strong ought to bear the infirmities of the weak.

Wearing heavier clothing in winter is put under Beauty, Custom, Duty, Completeness, and Inference, as well as under Safety and Utility, where it belongs.

Beauty, Duty, Justice, and Inference are among the reasons cited why an axe ought to have a longer handle.

Half of these judges classify the statement that garden peas ought to be soaked before planting under Beauty, Custom, or Completeness.

That there ought to be fire where there is so much smoke is by three fourths of these students placed under Inference, where it belongs. But the remaining quarter place it all over the map—under Beauty, Custom, Duty, Completeness, and even Safety.

Such confused classifications are taken to indicate that the high school level is the appropriate place to locate a formal course dealing with moral evaluation, to supplement the specific habits and tentative generalizations of earlier years. On this level boys and girls appear capable of using principles and abstractions, but in many cases they do not clearly perceive which ones are involved in situations confronting them. A later chapter will be devoted to the description of a new type of moral instruction based on such observations as those here reported.

To those with practical and social interests at heart it will be a matter of concern to learn to what degree insight of the kind here measured is related to actual conduct. Of course approved habits of behavior may be established through learning, social pressure, imitation, the acceptance of a code, fear of punishment, and various other means, more or less regardless of insight into the why and wherefore of the things done. Ethical tests heretofore developed have usually been directed toward the inquiry as to whether the individual's judgment of the correct thing to be done under specified circumstances accords or not with approved social sanctions or commandments.

In this investigation we have attempted no inventory of any individual's habitual modes of behavior, nor of the value he places on specific outcomes or acts. Instead we have inquired into his understanding of the motivations involved in any outcome that might have an ethical or obligatory status. Entirely subsequent to such an account would lie the practical program of canvassing various sections of the population and determining not only the scores made on such a test as this but the relationship between such scores and the conduct habits of the individuals concerned.

If a positive relationship should be found, the next step would logically be the development of programs of "moral instruction" calculated to acquaint the young with the array of oughts and to promote their understanding of the principles underlying the various obligations and imperatives expressed by current codes, sanctions, and standards. There is some reason to believe that, no matter how decent conduct may be, it does not really have moral quality unless the actor appreciates the criteria on which the decency depends.

CHAPTER 3

ETHICS AND THE SCHOOLS OF PSYCHOLOGY

Those who do not understand the nature of things do not verify phenomena in any way, but merely imagine them after a fashion and mistake their imagination for understanding.—SPINOZA.

Among the numerous modern systems of psychology there are four that have attained impressive status. Their prestige justifies the demand that by each of them some account should be given of the sense of obligation. Two of these, the schools known as structuralism and behaviorism, take a cavalier attitude toward such topics; we can dismiss their presumable viewpoints with brevity. The other two schools, the Gestalt theory and the hormic psychology, do not evade the issue. They assume full responsibility in the matter and undertake explicitly to show how their respective principles account for the imperatives in thought and action. These two viewpoints must therefore be considered at greater length. If it should be found that no one of these historically famous systems affords a satisfactory understanding of the experience of obligation, we shall have to do what we can to find or to provide a psychology that is more adequate.

Structural Psychology and Imperatives

There is a classical variety of psychology known as structuralism, existentialism, introspectionism, sensationism, or the psychology of elements. It is easy to say what a good structuralist would do if confronted with our list of oughts and their classification. He would laugh and turn away contemptuously.

For a structuralist the work of psychology is the description and analysis of conscious experience in its first intention or immediacy, without reference to such things as meaning, value, origin, or use. If you wish to study the "ought experience," you must catch yourself in one, turn your analytical scrutiny in upon it (introspection), and describe how it "feels."

You will probably find it to be a somewhat complex pattern of elementary forms of experience, these being sensations, images, and simple feelings. These will have attributes such as quality, intensity, duration, clearness, and the like, which will identify and distinguish them. You must describe all these elements, show how they are associated, sequenced, blended, or otherwise combined in the complex, and then, strictly speaking, you are finished.

You cannot "explain" any of your findings psychologically. For explanation you must turn to neurology, and since this science is so backward you must just *invent* such laws of neural activity, nerve forces, and brain tendencies as you seem to need. Even your references to the sense organs must be largely hypothetical. All these inventions are devised by you on the basis of your phenomenal observations, but you will forget this and immediately make them the cause of the facts you observed. But not really the cause, for consciousness is not produced by them, it just runs parallel to them, and in this sense only is a *function* of them.

And the structuralist will continue: "Put me (or any other well-trained introspector) in one of your imperative situations, or read one of the statements. I will then tell you how the ought feels when it comes along in my stream of consciousness—whether the sensory components are visceral, visual, or olfactory, etc., and of what quality, intensity, and so on. So also for the images, and the affective elements. I will tell you how they are patterned or structured in time or in the field of attention, so that you will know just what my experience is like.

"Then we will try some other oughts. If any have approximately the same feel, I'll class them together, as you request. Each may be unique. Or some of your so-called logical oughts may feel just like some of your ethical ones, and they'll have to

go together. Some oughts might be predominantly sensory (say kinesthetic) or have kinesthesia as the core—like the ones about diving, about the axe handle, and the driver. In some, imagery (say visual) may be the core or nucleus, the other elements being marginal or in the fringe, the feeling tone fusing with this total pattern, like the oughts about soaking peas, introducing people, and having a wider frame. At most we could only have different components and different arrangements of these, with varying attributes. When I am through you will know the different kinds of ought and how they feel when they are immediate in consciousness, quite regardless of what they mean, and of their value or origin.

"But this list of yours," he may continue, "having been worked up into a kind of rage, is just silly. It is not psychology, but education, technology, logic, or something like that which you have been doing. You classed the oughts according to what you call their foundations, their origins, their bearings, their meaning. None of these is a psychological term. Furthermore, you have not invented any nerve forces to explain or be parallel with your different classes. Since you haven't even taken a psychological attitude toward the topic, how can you expect to get any psychological results?"

We should add that a heretic branch of these structuralists, finding it difficult to analyze many of their experiences into the conventional elements of sensation, image, and affection, propose to add another "element" to the list, which they variously call conscious attitudes, imageless thoughts, or pure thoughts. Thus one of them writes: Conscious attitudes are "something quite peculiar, which I find in my consciousness, without being able to call them feeling, sensation, or idea, because they are entirely unlike these psychic processes."

Another such person cites a long array of such "conscious attitudes," a list which includes such "attitudes" as "positive or negative value," "correct, wrong, inadequate," "doubt," "certainty," "ought," and "ought not." But still another structuralist (Titchener)¹ insists that "The imageless thoughts, the

¹ E. B. Titchener, *The Experimental Psychology of the Thought Processes*, New York: The Macmillan Co., 1909.

awarenesses, the conscious attitudes . . . are 'attitudinal feels,' describable in the rough without difficulty as visceral pressures, distributions of tonicity in the muscles of back and legs, difference in the sensed play of facial expression, and other kinaesthetic and organic sensations; and under experimental conditions description would be possible in detail."

Some one may someday study the *ought* consciousness in this way; perhaps some one has. The nearest thing to a sample that I can readily find is Washburn's analysis² of "the feeling of but" or a similar analysis given by Titchener.

Washburn believes that motor attitudes underlie all these conscious attitudes and that their feel is the awareness of these movements. The "feeling of but" she describes as an experience accompanying the organic disturbance when incompatible movements are aroused by connected associative dispositions. The conflict gives rise to a characteristic motor attitude or tension. In light degree this disturbance appears in consciousness as the "feeling of but." When elaborated and more diffuse such an organic disturbance becomes the feeling of being puzzled or confused.

Titchener's analysis³ of the "feeling of but" is much more concrete; he is an out and out sensationist and thinks that a good man ought to be able to analyze any conscious attitude into its actual components. For him the feeling of *but* comprises a visual image, a motor tendency, and sometimes pleasantness or unpleasantness. The picture is that of a bald head, a fringe of hair, and a massive shoulder (black) flashing diagonally across his visual field. He senses a tendency on his part to imitate this movement—this being kinaesthetic experience. The feeling of but is this mixture or pattern of visual and motor sensation, plus whatever affective tone it may or may not have.

These samples at least show us approximately what kind of an account would be given by a structuralist who undertook to give us a sound description of the feel of an ought. But I have

² Margaret F. Washburn, *Movement and Mental Imagery*, Boston: Houghton Mifflin Co., 1916, p. 202.

³ *Op. cit.*, p. 185.

asked a number of persons, including distinguished psychologists, to classify our array of imperative statements. None of them did it by their feel, and it is far from clear what we should have learned about conduct even had they done so.

The Oughts of a Behaviorist

The original behaviorists were psychologists who grew weary of the introspective descriptions of conscious feels that occupied the structuralists. They decided not to let the subjects of their experiments cooperate in the observations, but to make all these themselves, by looking, taking pictures, or getting mechanical records. Treat the human just as you do a plant or animal, they said. Stimulate him and see what he does—which muscles move, which glands act, and how. If he begins to talk and says he has images, feelings, intentions, wishes, conscious attitudes, and the like, you may record these speech movements as such. But pay no attention to what they pretend to report. The subject is deluded; he thinks he has a stream of consciousness, but he has not, for there is no such thing. All he can really do is react to stimulation, in motor and glandular ways. Record his movements; measure his reaction time; count the drops of his saliva. There you will find the alleged mystery of mind.

Some of his acts will be overt and apparent, because of their grossness; some of them will be organic and delicate, that is implicit. Some of them will be unlearned, that is, reflex; others will have resulted from conditioning—that is, the substitution of new stimuli for the native ones. This learning or conditioning process is of special interest. You will probably get farther by observing white rats and chickens, for these do not also pretend to be psychologists and they will not mess things up by claiming to have a stream of consciousness, full of aches, pains, memories, desires, and thoughts. All these are unreal, just as Mary Baker G. Eddy always maintained.

Of course they will really be conscious—that is, not dead or asleep or drugged. So will you, but don't let this worry you. Geologists and chemists are also better when they are conscious,

but they don't mix up this fact with their rocks and test tubes. Consciousness at best is just making speech reactions instead of or along with other kinds of twitches and secretions. Just remember, there are no sensations, no images, no feelings, no ideas. There are emotions, but these are only diffuse and uncoordinated patterns of muscular and glandular activity, largely confined in their effectiveness to upsetting the smooth operation of other and better movements. Thus speaks the behaviorist.

It is easy to see what these behaviorists would have to say about oughts and imperatives. Perhaps you have heard of the famous infant who is said to have spoken the next minute after he was born—at least two words are recorded. He looked smilingly up into the doctor's face and said—absolutely nothing. Of course the behaviorists will observe that some acts follow their stimuli more promptly than others. This will be due to the intensity of the stimulus, to inborn connections, to the amount of conditioning, to the excitability of the pathway. They may admit reenforcements, inhibitions, experimental extinction, refractory phase, and other neurophysiological concepts. And they may distinguish between positive or approach movements and negative or avoidance responses.

The short handled axe, people working on Sunday, or wearing light underwear in winter, or a wedding ring on the thumb, are stimuli, for most folks, to avoidance responses. The response may be overt (like running away) or implicit (like shaking the head, shrinking, or mumbling "No! No!" in incipient vocalization). Such responses might be native or learned, slow or prompt, etc.

Other stimuli, or even pictures or descriptions of them, will provoke positive or approach movements (overt or implicit) like coming closer, nodding the head, or saying "Yes" in inner speech. Educated animals can even be taught to put statements like "It ought to rain tomorrow" into either of two piles, a YES pile and a NO pile, thus artificially or symbolically exhibiting approach or avoidance. But you'd better record their blood pressure or breathing ratios or galvanic resistances or watch the flow of their saliva meanwhile, for educated sub-

jects, when they talk or answer questionnaires, are not always to be trusted.

For such a psychology our *imperatives* can only mean the relative frequency or probability of a given response, of approach or avoidance. Degree of imperative can mean only the promptness or vigor of the act, the strength of the connection. And our categories of ought dissolve into classifications of materials. All other classifications could only be statistical, that is, numerical, and they would fall into a continuum.

For the strict behaviorist the organism is a mere machine. One of the most astute attempts to analyze behavior on this basis is that of Hull,⁴ who makes frequent use of the concept of *need*. By *need*, however, he means not an experience but an economic state, a condition in which commodities necessary for survival are inadequately present. Such a condition, which admittedly may in some degree arouse certain receptor organs, is often to be relieved only by some activity of the organism, directed perhaps toward some feature of the environment. The *need* may be said in this sense to motivate the activity. It is to be noted that these needs are abstractly described; they are hypotheses of the experimenter, not feelings of the organism's condition. For this author hunger, which illustrates a need, is not a pang but only a meager food supply, or at most an alleged biochemical state. Such a drive or motive, not easily observed by the experimenter at a given moment, is thus reduced to a postulated "intervening variable." But what is a postulated intervening variable? Is it not either just a spook or else just a restatement of the observations in an esoteric code?

Hull nevertheless proceeds to talk about needs as if they were observable and experiential; at least they have degrees of intensity which could scarcely be true of abstractions and hypotheses. When a child is pricked by a pin, "if the need be acute the child will scream loudly." This is ambiguous indeed. Is it the degree of the biological lack or is it the intensity of the experienced pang that is correlated with the child's activity? For the behaviorist at least the answer is clear: the sensory

⁴ C. L. Hull, *The Principles of Behavior*, New York: D. Appleton-Century Co., Inc., 1943.

mechanisms may be aroused in different degrees depending on the character and degree of the lack of commodities, and the lack directly stimulates the motor adjustments. Degree of imperativeness in conduct reflects only the magnitude of this absence of commodities.

An escape from this mechanistic conception is provided, perhaps unwittingly, when we are told in effect that signs or symbols of needs may be as effective as actual needs. Drives, we are told, may become active long before conditions become even in the least injurious to the organism "in situations which, if more intense or prolonged, *would* become injurious." This observation (and it is sound) of the power of a sign or symbol is at least a long step removed from the description of the organism as a mere robot and of needs as merely the paucity of commodities.

The main features of this account of the more or less vegetative activity of simple animals like the rat have certain approximations to adequacy, but as it stands we can make little headway with it as an account of human feelings of obligation. For one thing the concept of *need* as a lack of commodities is wholly negative, for a lack is a mere absence, a mere nonexistence of something. And how can a nonexistent account for anything? I am reminded of a college friend who, describing his brother, said "He wants a toe." This puzzled me, for I took the "want" to mean an active distress, like wanting to eat or to rest. It was finally made clear that the brother had no real craving for a toe; he had simply *lost* one. Now *want* is to be sure sometimes synonymous with lack or need, but this kind of want never gets anything done. In this sense the elephant wants wings, and this is the sense in which Hull would like to use *needs*.

So far are human beings from being pushed around by what is biologically favorable for their survival that much of what they do appears to have just the opposite outcome; indeed the opposite outcome may be actively sought. In a survey of conditions in a tenement district, in reply to questions about diet, a woman said that "She didn't eat what she'd ought but what she'd ruther." No, the fact is that the things we set our

hearts upon are often enough very bad for us and for the species. It is equally true that many of the things we need in Hull's sense never become effective motives.

Strictly speaking, it is only those biological necessities that stir our pain receptors (arouse our misery) that become motives. And these receptors are stirred by many situations with little or no relevance to biological survival. No doubt the case is simple with white rats, but these animals do not recognize our nine or ten varieties of obligation.

The doctrine that nature has arranged that the things that are bad for the species will motivate us reflexly to corrective activity is an old Spencerian dogma that no longer holds water. It is not needs but distresses that serve as our motives. It is not "need-reduction" (Hull) but alleviation of misery that is the end of action. And as Hull recognizes, such distress may be aroused by signs or symbols long before any actual biological danger is present. On the elementary adaptive level to which Hull applies his concepts they work well enough, and in his hand ingeniously. But it is not yet clear how they are to be applied instructively to our list of humanly recognized varieties of obligation.

The vigor of the behaviorist's avoidance reaction⁵ to our present array of problems would be matched only by the sensory vividness of the phenomenal pattern found in the consciousness of the structuralist. If we want to be taken seriously by psychologists, it is clear that we must appeal to those of some other denomination.

Application of Gestalt Principles

Each of our categories of ought involves some sort of compulsion, imperative, or necessity. We need to look more closely

⁵ The only explicit reference to imperatives that I have found in the behaviorist literature is in one paragraph of "The Behaviorist's Prayer," written in jest by a student in the University of Pittsburgh and printed in the September, 1927, number of the *Psychological Bulletin*. There are five paragraphs, and one of them reads as follows: "Again we implore Thee, O sum Total of Electron-Protons, that our inspiration-expiration ratio may ever be harmonious with our subvocal speech. Increase our opsonic index; accelerate our reaction time, and thus may we approximate perfect obedience to the *energetic imperative*. And though we walk through the valley of the shadow of depressed metabolism, may we secrete no useless adrenalin."

into the nature of compulsion or necessity as a feature of human life. There are of course in experience forms of compulsion that may not appear related to those here considered.

There is the compulsion of natural forces, such as the wind, tides, gravitation, impact, the pulling power of an engine, the action of levers and magnets, dynamite, and earthquakes, which move all kinds of objects and *compel* them to move in certain specific ways.

There are in animal and plant behavior the tropisms and the reflexes in which, given intact mechanism and stimulation (that is, certain premises), action follows inevitably. Nothing is more urgent than the necessity of a reflex.

In human activity there are compulsions, obsessions, imperative ideas that insist on appearance or execution, even against resistance and in spite of inconvenience and disadvantage. And there are phobias, or compelling fears, which in a way correspond to the *ought not*s of our statements.

However, according to a modern point of view known as the *Gestalt philosophy*, all these things follow the same laws—the laws of field organization or field dynamics, the laws of configuration or structure. All acts take place in larger systems of which the equilibrium has been disturbed. Such disturbance results in gradients, vectors, or lines of stress, differences in potential in different regions of the system. Such a disturbed Gestalt struggles toward a restored equilibrium. Action takes place along these gradients or between these points of different “potential” in such a way that restored equilibrium of the system will be achieved in the most expeditious way permitted by the circumstances.

The water in a bucket “naturally,” and if left to itself, maintains a level surface. If you break upon this equilibrium or “complacency” by lifting out a dipper full of water, thus creating a *low point*, you set up such a gradient, such differences of potential. Water in the high surrounding regions rushes into the low point to fill the gap and thus restore the level surface. In one way or another *the whole bucket* of water is involved. Whatever adjustments of position are *required*, that is, *ought to*

take place, to restore the original flatness *will occur*. Currents, or activity, will be the result. And in this process pressures and tensions and locations throughout the whole system will change, and each change is what it is in the light of this *totalitarian* adjustment. There is *compulsion* in these changes. Each occurs because it *must* or *ought*. Each current is what it is because that is the only thing it possibly could be, in the light of the total field or system of which it is a part, which system tends always to assume the *best* figure. Each drop of water is an *organic part* or at least a structural part of the bucketful, not merely an additive increment to other drops.

This point of view draws its examples mainly from the fields of thermodynamics, hydraulics, electricity. But it advances a principle of *isomorphism*, according to which the same general set of laws governs all systems of whatever material or in whatever field. In particular, *isomorphism* is supposed to hold between the patterns of energy stress in the brain and what we call experience or behavior. These Gestalt principles, it is maintained, are operative in human behavior, which *must be* just what it is, and which can be understood best, or perhaps only, in terms of these laws of configuration.

We shall at a later time examine in detail the analysis of ought, or, as he calls it, "requiredness," offered by Koehler, a Gestalt leader, in his book *The Place of Value in a World of Facts*. But even before that examination it will be possible and perhaps instructive to try out the Gestalt principles, tentatively, on our list of categories. We may find that the principles fit well enough at least to show why the Gestalt philosopher is tempted to see his laws in operation wherever he looks.

Since one of our nine primary categories was a direct statement of the laws of phenomena of Gestalt coercion, we have only to consider the remaining eight. Can they all be brought under this category?

We might maintain, for example, for our category of Inference, that a complete syllogism represents, or at least reports, an organic whole or pattern, a systematically related set of details. If the premises only are given, the conclusion might be

expected to occur with the inevitability of a reflex, thus filling the gap, completing the Gestalt, and illustrating the *law of closure*. Thus,

All men are mortal.
Socrates is a man.

"Socrates is mortal" ought to and must of necessity *follow*. It *follows* logically, even if not in thought or speech!

Even if but one premise and the conclusion be given, this law of closure might be expected to produce the other premise. Thus in our example "The morning is clear; we ought to have a fine day" we have already suggested that the other premise—"Clear mornings are followed by fine weather"—is implicit, perhaps so obviously as not to merit assertion.

In some such way, or in more sophisticated jargon, we might show how the laws of logic are also the laws of thermodynamics, hydraulics, and electricity; and, for some, such a conclusion might be intriguing. Binet and also Spearman long ago made similar attempts to put the laws of thought on a mechanistic basis. And in Koehler we find an ultramodern endeavor to apply the law of isomorphism to such mental activities.

There is at least one fly in the ointment, however. If the processes of closure, *Prägnanz*, complex completion, and restoration of equilibrium are really inevitable, it is difficult to account for error. The field forces ought, we might say, never to make mistakes. For water suddenly to begin to run up hill, following the dipper, instead of rushing into the region just emptied, would mean either that some Gestalt was on a rampage or that certain factors had been omitted from the description of the field.

However this may be, we know that our logical processes are full of error. Fallacies in reasoning might almost be said to be the rule, so seldom do two premises lead inevitably to their valid conclusion. But if the law of closure really governs, or even only describes, our thought activities, ought not all syllogisms to be valid?

There is something wrong here, and it is rather easy to see what it is. It is not the stress in an incomplete syllogism that is relieved by the conclusion. Instead it is some doubt or distress on the part of the thinker that the conclusion alleviates. And this personal distress may often enough be relieved or resolved by a conclusion that does not follow formally from the premises. It is not really a *closure* that occurs, but an *erasure*. But the resemblance between the resolution of a strain or *stress* and the alleviation of a *distress* is so great as to give the Gestalt account some attractiveness and perhaps to put us on the track of a doctrine that seems better to fit the actual facts.

To turn now to a third category, the *oughts* of taste, preference, and esthetics fit rather neatly into the Gestalt conceptions. When we read:

The picture ought to have a wider frame.

The pudding ought to have more sugar.

The black cover demands a gold border.

The room requires a lighter tone of paint.

It is rather easy to see that we are dealing with patterns that would *adequately* be completed by certain items, which are not there. Instead, some unsuitable item may be present. This inappropriate element, or the gap, is a disturber of the integrity and the perfection for which all organizations strive. For according to the Gestalt law of *Prägnanz*, each configuration strives to be the *best possible* structure; it moves in such ways as to become as *good* a Gestalt as it can. The so-called *good* figures or patterns are the approved designs of esthetics. They are in structural equilibrium and exhibit no strains or stresses, contain no gradients of different potential, and there is in them what might be called a *repugnance* for, a rejection of, such details as mar their calm perfection. It is this *demand for a correct detail*, this distaste for an *inappropriate* item, that is involved in the oughts and musts of the esthetic category.

So far the doctrine fits neatly enough. But perhaps we should be hesitant in placing these demands and rejections in the *structures*. After all, somebody judged the picture frame, the pudding, the solid black cover to be adequate. They even

made them that way, and perhaps found contentment therein, quite oblivious of the rumor that the designs were meanwhile invoking all the laws of thermodynamics in the endeavor to be something else. We are told that when the Lord had made the world He "saw that it was *good*." But there have been quite different judgments passed on that world since that day.

Apparently, again it is not the stresses of the configurations, but the distresses of their makers, that are crucial. In so far as this is the case, the oughts and imperatives of esthetics assert merely that some one else finds these configurations unpleasant or pleasant, as the case may be; or at most that "the best people" or perhaps experts or professionals do so. In any case it is the tensions in various individual persons, not the vectors in the configurations, that are involved, and what is one man's meat is another man's poison. It is *personal distress* rather than *cosmic strain*, idiosyncrasies of taste rather than field forces, from which the ought of esthetics derives its coerciveness.

This coerciveness, furthermore, varies significantly in content and force with different epochs, different cultures, different individuals and backgrounds. The imperatives of logic may be eternal, that is, timeless; but the canons of taste are not. But they *ought to be*, if the alleged tensions are in the designs, patterns, and structures rather than in the observers.

We come now to a category in which the ought is grounded or alleged to be grounded in the welfare of society. It requires no great imagination to conceive Society as an elaborate structural system, standing out as a figure upon the background of the rest of the cosmos. The *best social organization* will then be striven for, *closure* will provide missing elements, and disturbing details, sources of social strain and tension, will tend to be submerged and obliterated by the laws of field dynamics. Gradients of unrest will be set up, and along these vectors will occur trends of action making for improvement.

Outside agencies, such as storm or disease, may disturb the social complacency, produce gradients of tension, and result in activities calculated to restore equilibrium. Or within the system components not duly subordinated to or synthesized into the larger Whole may be the disturbers. Modification of the physi-

cal and cultural environment, and reformation of the refractory components, will therefore happen or want to happen, following the laws of closure, *Prägnanz*, equipotential, and least action. By virtue of the law of isomorphism all these changes will occur as inevitably as the water in a bucket falls again under a flat surface. The imperatives of social expediency, the oughts of communal welfare, indicate merely the character of these changes.

It might even be added that no one need worry much about them. Individual action may perhaps hasten them, but even then the individual would be but the instrument of the Larger Whole. No one drop of water need feel any great responsibility for maintaining the water level in the bucket. Even if it should act, and when it does act, its movements will be dictated by the laws of the larger whole, the Great Society.

Before the Gestalt philosophers became vocal, the poets (I am inclined to say *other* poets) had expressed a similar faith. They had no doubt that

. . . through the ages one increasing purpose runs.

Or again, it seemed clear to some of them that there is

One God, one law, one element,
And one far-off divine event
To which the whole creation moves.

To such a fancy the oughts of social welfare fit well enough into the Gestalt doctrine. But is such a fancy a true picture, or is it only a huge myth? *Is there* any such organism as *society*, or is this word only a convenient summary of a multitude of individuals reacting to one another as stimuli, as they react also to other stimuli? Are institutions really entities, or do they exist only *after* the facts of which they are the name? It looks as if we must sometime consider more fully the nature of an institution, of which Society is an outstanding example.

For the present it is enough to raise grave doubts of the capacity of Society to feel strains and stresses, to have aspirations toward perfection, to be complacent, and so on. The

oughts of social welfare really refer to the relief of actual, not mythical, hurts and pangs. And these are always the distresses of an individual, not the pangs of an institution. Intriguing as is the endeavor to find mechanical analogies in the processes of social change, it begins now to appear as if this endeavor results at best only in a glamorous analogy. But the isomorphism of Gestalt philosophy claims to be more than an analogy. It claims indeed to reveal *one set of laws*—the laws of field forces, operating everywhere in the universe.

Perhaps the category of Utility fits the Gestalt conceptions as well as any. If

A knife ought to be sharpened
An axe ought to have a longer handle
A road ought to be paved
A motor-car ought to have effective brakes
A handle ought to be gripped loosely
Peas ought to be soaked before planting

what do such oughts imply? A tool, a highway, an athletic feat, an agricultural or engineering job, and the like are in a very real sense designs, configurations. They are total patterns that really occur only when the steps and materials involved in them fit *harmoniously* together. Often the mere sequence of steps is important, and even slight deviations from good form, trade practice, or technique may disrupt the whole plan. Then the knife will not cut, the axe will cause fatigue, the road will not accommodate traffic, the crop will fail.

The imperatives of technology designate items of such a total configuration which are important but in danger of not being duly considered. The whole, we may say, *demand*s these parts, these steps, these materials, this arrangement. In their absence the structure collapses or the goal is achieved haltingly and is an *inferior* performance. Any act of skill, of construction, of achievement, *strives* toward mastery. This is the law of *Prägnanz*.

The ought of expediency is a device for effecting *closure*, for insuring that a vital link is not missing. Anyone who has observed a novice or an awkward artisan feels that the oc-

casion, the undertaking, *calls for, demands*, this or that detail of procedure. And it may be that in the long run (but far from always!) practice tends to organize such acts with maximal effectiveness, the configuration thus actually moving toward *better* organization. That this is not always the case should perhaps be taken into account by the Gestalt philosophy more fully than it has been. It corresponds to the problem of *error* that we encountered in the case of the logical category.

The assertion of the ought may often be a short-cut, a way of abbreviating the period of trial and error. Otherwise it may dispassionately describe the actual components of a good configuration. After all, a knife that will not cut is not a *knife*; a ball that does not go over the net and land in the court is *not* a serve; digging that does not facilitate the growth of a crop is *not gardening*, and so on. Even the *perfect crime*, a beautiful example of the conception of a Gestalt in behavior, requires that every detail be correct and properly integrated, timed, and placed throughout the whole performance.

A single slip may miss the game,
The safest ship go down;
And one mistake may bring to blame
The wisest man in town.

So far the case for the Gestalt doctrines appears rather convincing in the category of Utility.

It may be noted, however, that all these imperatives of technology or expedience are the result of *discovery*. One set of movements is actually as much a pattern as any other. There are in fact occasions in which a knife can best be dull, a handle short, a road unpaved. When is one the case and when the other? It is really not the configured activity but the aim of the act, the use of the implement, that dictates the imperative. In a jig your feet move one way; in a fox-trot they move differently. But there is nothing in foot movements that dictates what is to happen.

The oughts of Utility grow out of experience, or they are prescribed by science, which is summarized experience. Until they are discovered they do not exist, and when conditions

change they may no longer hold. For Gestalt philosophy, however, and it is very insistent on this point, the laws are *prior to experience*. They are natively inherent in structures. The stars do not need to *learn* their orbits; water runs from high to low points from the very beginning. *Good* configurations are presumably good in their own right; all that learning and discovery can do is to acquaint us with their characteristics. One is tempted, in considering this struggle of configurations to be *good*, to inquire "Good for what?" But this would introduce a problem (the nature of good configuration) which, though by no means foreign to our present interests, would emphasize at this point Gestalt philosophy rather than our search for the interpretation of various kinds of ought. It is however a problem that we should eventually do something about.

It is enough for the present to observe that the aptness of this philosophy to interpret the imperatives of technology is very specious. Technology is not an *a priori* matter but the result of long and laborious inquiry, discovery, experiment, invention—in general, of experience. Gestalt principles are alleged to be prior to experience; in fact they should, if valid, dictate the course of experience.

We can go even further without trying to be flippant. In a world of unqualified Gestalt principles knives would sharpen themselves, short handles would grow longer without bidding, roads would sprout their own pavement, and every workman would be an expert in everything. But such a world is not the one we know. In the world that we know "The Unfinished Symphony" remains unfinished.

How now about the application of Gestalt concepts to the oughts that grow out of ethical and religious scruples, ideals and viewpoints, the imperatives that rest on conscience? We have not yet investigated the phenomenon of *conscience*, but that may be reserved for the future. Consider the following:

Capital punishment ought to be abolished.

You ought not to labor on the Sabbath day.

The strong ought to bear the burdens of the weak.

A man ought to tell the truth, regardless of consequences.

I do not know that any gestaltist has suggested the bearing of his principles on conscience. Perhaps Koehler,⁶ in his discussion of "requiredness," comes near to doing this. According to him the *phenomena* of "requiredness" are common experience. A melody demands a certain tone as its conclusion. Other notes leave the pattern unfinished or incomplete, and are "wrong." Tones of a phrase already sounded (thus phenomenally gone) "require" a certain continuation or completion. We may try to recall the name of a certain town; it does not come, though other names do and these are "rejected" as not meeting the "requirement." In artistic compositions in various fields these "requirements" are often sensed.

Koehler believes that these "demands" are phenomenal realities, attributes, or relations, just like the color of a flag, the friendliness of a face or of the landscape, the tenderness of a posture. And in keeping with the law of isomorphism he considers that phenomenal "requiredness" or "belonging" is the correlate of certain dynamic properties of energy patterns in the brain, which in turn obey all the Gestalt laws, such as closure, *Prägnanz*, etc.

In the category we are now considering we presumably start with some ideal, some example, some authoritative code, or else with an immediate feeling of right and wrong. The ideal may be that of "the good man" as in Plato's dialogues. The example may be some hero, as in the famous criterion, "What would Jesus do?" The code may be some inculcated or otherwise accepted set of rules, such as the Ten Commandments. Or there may be a more abstract philosophy, such as the Golden Rule. We could say as gestaltists that the criterion *requires* such and such behavior. That is to say, in its absence the ideal is unrealized and the picture is incomplete. The hero is not imitated and the code is violated. All such outcomes represent *inferior* configurations. *Complete* pictures, hearty worship, effective philosophy imply some other behavior, of the type specified.

Perhaps we should consider that *the actor* cherishes the

⁶ W. Koehler, *The Place of Value in a World of Facts*, Liveright, 1938.

ideal, the hero, the code, and himself strives to make his acts compatible with them. Such compatibility or consistency would then constitute a *good Gestalt*, and the goodness would arise simply out of the actor's (or adviser's) desire to achieve it. For the gestaltist an inharmonious configuration is a *poor* one. The pattern of the hero matched with that of a closely emulating devotee would be a *good* figure, and the compatibility would be equilibrium, balance. The hero *requires* that the loyal follower do so and so. For this not to be, indeed, would mean that he was *not* the hero.

Perhaps this is as close as we can come to explaining the coerciveness of the ethical oughts by the gestaltist's "requiredness." And it is significant to note that even to make this somewhat sketchy application we have had to leave the field of objective configurations and try to get some notion of the *subjective* pictures, intentions, and viewpoints of the actor or the speaker. These have no necessary fixity, and they may be held faintly or with tenacity.

It may be pointed out that even in Koehler's nonethical examples of "requiredness" it is not really the *tones* that require a certain continuation; not the melody that is *obliged* to end on a certain note; not the town that feels that a certain name *belongs* to it. Instead it is the listener, the person trying to remember, who has these requirements. That is to say, the requiredness, which Koehler calls a "physiognomic" property of the tone, is really only a certain unrest of the listener who is satisfied by one ending rather than another.

Here also it is required to get away from the objective configurations and into some individual's feelings about them. Then we may or may not find the "requiredness." But we certainly do not find it in the materials themselves. And as in the case of the imperative of utility, even here we are likely to find that the requiredness, if present, is a function of the past experience of the individual, not an intrinsic property of tones, names, and the like.

Even if we should meet a stranger and declare that his name "ought to be Percy," that his appearance or other attributes *demand* this name (a rather extreme case of requiredness), we

could be pretty sure that this feeling was based on the characteristics of other Percys we had known and not on the intrinsic laws of configuration. You remember the farmer who said he could understand why Adam called the pig a hog, because the name fitted that animal exactly! The farmer was a good gestaltist, but his analysis was superficial.

In the application of Gestalt principles to the oughts of mental, physical, and social hygiene of the individual there is a close resemblance both to the imperatives of utility and to the requiredness of duty.

One ought to be careful in the choice of friends.

You ought not to dive with your eyes shut.

You ought to wear heavier clothing in the winter.

Uncooked fruit ought not to be consumed along with beer.

A life attended by health and prestige is a kind of configuration. There is what has been called "a design for living." The integrity, goodness, and equilibrium of this design are promoted by certain acts, disturbed by others. A given kind of career may thus be said to *require* a certain array of acts, and it is these acts that the oughts indicate. The imperative consists in the necessity, the *belongingness* of acts of the kind specified. The statements merely record or express this demand or necessity. "If you would survive or succeed, then you *must* do so and so."

In the same way a given creature *requires* a certain kind of environment; the environment may in turn be said to *require* a certain kind of creature, that is, in both cases, life will cease unless these particular patterns occur. The "fitness of the environment" is a common term that fits neatly into the Gestalt conception.

Or we may consider instead the *codes*. A general body of approved doctrine grows up in connection with each field in which personal safety may be endangered. There is a code of mental hygiene, a body of rules prescribing for physical health and longevity, and even a systematic treatise on "how to win friends and influence people." These codes, we say, *prescribe* certain acts. There is a *requiredness*, similar in character to

the imperative of ethical systems, or religious and other ideals. Nonconformity is disturbing. The athlete who breaks training not only jeopardizes the success of the team, he also violates the training code, making the design into an inferior rather than a good one, in the Gestalt sense.

Whether we consider the smooth operation of the design for living, or this or that code of safe behavior, the ought expresses the intimate organization or incorporation of the specified act in the larger system. The nature and quality of the act are determined by the total field, and the fate of the larger whole is in turn contingent on the responsiveness and obedience of the part. This requiredness or belongingness, according to our reading of the gestaltist, is objectively and phenomenally given, as are other attributes of either the detail or of the whole. We cannot *get behind* it any more than we can get behind red or yellow or sweet or bitter. We can only exhibit the environmental or the brain patterns with which they are isomorphic! Or we can invent such patterns as will be isomorphic with them!

Since the application of *Gestalt* principles to these categories of hygiene resembles that to practical utility and conscience, both of which we have discussed, no further comments seem to be called for. In both those cases we found the Gestalt account in one or another way to miss the mark.

As for the imperatives of propriety and convention, the Gestalt interpretation will vary with the actual or presumed basis of the customs, fashions, or ways.

The wedding ring ought to be worn on the third finger of the left hand.

Such an ought might conceivably belong to any of the categories already examined, depending chiefly on the origin or history of the custom. Presumably however we should include in this category only those cases in the origin of which the imperative has no bearing on its present coerciveness. Such cases would then be like the magazine cartoons with the legend "What is wrong with this picture?" Or like pictorial or verbal completion tests from which some detail is missing and is to be named or added to fill the missing gap. Or like the ungram-

matical sentences or misspelled words which the pupil is instructed to identify or to correct.

All these cases, along with the oughts of mores, taboos, style, convention, etiquette, illustrate neatly the gestaltist's conception of *requiredness*. What is *wrong* with the picture, the sentence, the ceremony, is that a *good* configuration involves the incorporation of this or that. If this or that be missing or supplanted by something else, it is not a good picture, a good performance, good usage. And it is of some interest that the word *wrong* is used both for these situations and for ethical and esthetic violations, as well as for trade practices and logical conclusions.

But we must add our usual reservations, for faulty etiquette does not inevitably correct itself; incomplete pictures do not, through the laws of field dynamics, grow eyes or ears or noses to replace the missing parts; and the correction of poor grammar or spelling is by no means automatically achieved. It is the observer, not the picture, that *suffers* from the missing part. The ought is grounded not in the picture's passion for integrity or excellence, but in the observer's discontent, however mild this may be. Apparently it would be more instructive to work back into the history and origins of conventions, and to consider the way in which practices are taught to the young and impressed upon the thoughtless, than to fall back contentedly on the laws of field forces.

We come finally to the oughts of justice. Here the gestaltist may feel that his contribution is especially significant. Perhaps this is the way it would run:

The concept of justice involves or designates a complicated and subtle organization or structure of personal relations. There is a delicate balance or equilibrium of claims and duties, privileges and responsibilities, debts and credits, demands and powers, rights and wrongs, losses and gains, many or all of which must be considered in any one situation so that the integrity of the total system remains intact. In such a system there will be conflict between parts and these conflicts, stresses, and strains must lead to adjustments compatible with the *best possible figure*. There will be manifold kinds of "required-

ness," but conspicuous among them will be the demand for equity, impartiality, order, freedom, interdependence. There will be liberty, equality, and maybe fraternity.

Disturbances of this system will be expressed from time to time in the law. But the law is secondary and instrumental. Justice is an objective property of any occasion or situation in which different *persons* enter into relationship. Like beauty, truth, and symmetry, justice will involve relations of correctness or requiredness among individuals and between individuals and the larger whole. Perception of such requiredness may be direct and immediate once all the factors are considered. The imperatives of justice and equity state what some of these relations of requiredness are.

All this seems highly abstruse. Perhaps it should be. But the case may be stated still more simply by resorting to the Gestalt concept of physiognomic properties. We directly recognize a situation or a relationship as amusing, disgusting, temporal, spatial, unpleasant, exciting, annoying, and so on. These are immediate properties of the situation. So also are justice and equity, and their opposites. Just as we can indicate features that are crucial for amusement, for annoyance, for spatial character, so also we can indicate factors crucial for justice, for equity. It is these features that the oughts identify.

Perhaps two relevant comments will suffice. It is true that we talk about a sense of humor, a time sense, a sense of beauty. Do we have actually a sense of justice, that informs us directly of the equitable and orderly attributes of the universe?

Finally, are amusement, disgust, and injustice really objective properties of things, or are they *attitudes* of ours toward things? Are justice and injustice really the names of Gestalt qualities or only feelings of content or discontent, approval or repugnance, that may or may not be aroused in us by this or that act? On such questions would seem to depend the adequacy of the Gestalt interpretation, at least in the form we have given it.

In general our conclusion is that the Gestalt philosophy is but an elaborate and intriguing electrostatic analogy. Instead

of the *stresses* of the cosmos, or of the patterns found therein, we find that it is the *distresses* of individuals that appear to underlie all these categories of ought, when they are submitted to analysis. But more of this later!

Perhaps our application has been faulty and inadequate; but it seems to me that the weakness or inaptness lies in the Gestalt principles themselves. To say merely that conscience requires this or that and that this is isomorphic with the individual's brain patterns, which always follow the law of field forces, seems to land us a long way from the actual phenomena of ethical compulsion. Furthermore it raises the question "How does the gestaltist come to know so much about brain patterns when other people know so little?" How is he enabled to state with such confidence his principle of isomorphism?

Gradients of electric potential in the brain, he says, *are* forces. And there may be such gradients between brain points corresponding to present items, and brain *traces* representing items not phenomenally present, but once known. The force of these gradients or vectors corresponds to what we know in experience as "requiredness" or "ought." Therein lies the isomorphism. But this isomorphism, and all this talk about brain mechanics, was never discovered and has never been observed materially. The isomorphism was imported into the brain patterns, which are wholly mythical and demonological. We find there only such isomorphism as we put there in the beginning.

It may be that a good gestaltist could set us on a better road, but we have followed the road mapped out for us by one of the best gestaltists we know. We believe there is a better road, and it will be our obligation at a later point to show the direction that this road takes.

In the meantime this is an appropriate place in which to cite certain experiments made to put some of the Gestalt principles to test. According to the Gestalt doctrine the elements making up a pattern or configuration should offer greater resistance to manipulation than do free items, not already organized into a meaningful whole. Words seemed to be good examples of organization in which each item (letter) has its place and role determined by reference to the whole. It should therefore be

more difficult to build new words out of the letters in the word *pedestrian* than to build them out of the unorganized letters, comprising no word, *tepdasiner*.

This was tried out under well-controlled and repeated conditions, using many words and combinations of letters, both with bright young children and with college students.⁷ The letters already configured to form words are not more difficult to re-arrange into new words. If anything, the brighter subjects profited from this pre-configuration in some way and actually made more new words than from the disorganized letters (nonsense patterns). This does not prove that all the Gestalt principles are erroneous. But it at least affords still another example in which they do not fit the facts.

Hormic Psychology and the Oughts

Let us next try the purposive or hormic psychology and see if we fare any better than with the Gestalt system of mechanical and hydraulic metaphors. The hormic psychology was warmly welcomed by the social sciences; the best example is the vitalistic and animistic system of William McDougall.⁸ Hormic comes from a Greek word meaning "drive" or "urge," and a psychology of urges would seem to be in a position to give a sensible account of imperative behavior.

According to McDougall mental behavior (learning, meaning, problem solving, goal seeking) cannot be given mechanical explanation. Its real basis is *purposive striving*, for which there is no mechanical equivalent. The realm of mind is an inferred structure which we build up from observations of (a) experience and (b) behavior. Neither experience nor behavior constitute mind, which is an extranatural agent, operating "according to laws of the soul's own being." Mind is not observable; it is really a great and indispensable hypothesis;

⁷ A complete account of these experiments is to be found in the following references: H. L. Hollingworth, "Conditions of Verbal Configuration," *Journal of Experimental Psychology*, XVIII, 3, June, 1935, pp. 299-306; "Verbal Gestalt Experiments with Children," *Journal of Experimental Psychology*, XXIII, 1, July, 1938, pp. 90-95.

⁸ See especially his *Introduction to Psychology*, New York: Chas. Scribner's Sons, 1923.

but it has enduring structure and persists even when it is not in operation.

Elementary in the structure of the mind are the instincts or mental dispositions. These give certain things a high attention value and arouse specific impulses to action in overt behavior as well as certain specific emotions in inner experience. These instincts are "the prime movers of all activity." They possess cognitive, affective, and conative (executive) segments. Cognitive and executive poles may be shifted, but the affective core remains unchanged, affording a primary emotion correlated with each of the fourteen chief instincts. There are also blended emotions, when several instincts act together, and derived emotions, as when one of the fundamental drives is interfered with or facilitated.

Finally there are the sentiments. These are learned patterns of feeling and attitude, associated with specific objects through frequent and perhaps complex experience. The sentiments endure even when not active; their elements are instinctive but their pattern, their objects, and their expression are due to experience.

As enumerated in one of the lists given by McDougall the chief instincts are those of escape, pugnacity, repulsion, parental activity, appeal, mating curiosity, submission, assertion, gregariousness, food seeking, acquisition, construction, and possibly laughter. For each there is a correlated primary emotion: thus fear goes with escape, anger with pugnacity, pride with assertion, and so on.

Of course the hormic system of psychology includes many more details. In a later connection when we examine the concept of sentiments we shall become more familiar with some of these details, and especially with McDougall's description of thinking. But for the present, since the doctrine of instincts is fundamental, let us see how far that concept can get us toward a better understanding of imperative conduct.

One might expect that if instincts are the prime movers, responsible for all activity, and if our list of imperatives covers the whole range of our behavior, some relationship might be found between the two lists. The prime *movers* of humanity

might coincide in some degree with the fundamental *oughts* of conduct. We could perhaps scarcely expect to find each category corresponding neatly to an instinct, for several instincts might be active together; but at least the list of instincts might throw some light on the array of oughts. By and large we might suppose that creatures *ought* to do what their fundamental structure fits them for and predisposes them to.

If we take McDougall's list of instincts as a sample, there is going to be no simple parallel, for there are thirteen or fourteen instincts and primary emotions, but only nine or ten categories of ought. Perhaps we can best begin with the imperatives and see how they may be related to one or other instincts, a procedure that is of course entirely too simple and probably too naïve, for the instincts and emotions become highly elaborated in our actual life. Still, that fact is worth knowing and disposing of, so long as we later do better justice to the hormic psychology.

First, the oughts of logical necessity—the conclusion follows or is *implied* by certain premises. Nothing in the list of instincts and emotions seems to afford any ground for such imperatives. No instincts of McDougall's list would compel us to draw one conclusion rather than another from two premises. They *might* however explain some errors! None of his primary emotions appears to be related to the logical feelings such as doubt, contradiction, certainty, although we find *belief* described as a "derived emotion."

The reason is that for McDougall the intellect is a mere tool, developed in the interest of the instincts, just as were wings, horns, legs. If there are any logical imperatives it is only because these serve the instincts as a whole better than any other arrangement. The pains of logic are on the same plane as those of rheumatism and other ailments of our executive equipment. We shall see later what account McDougall gives of "reasoning" when he turns specifically to that topic.

One wonders why, since our thought processes are so rigorously determined, the instinct mongers have not listed one or more logical instincts. Even the inclination toward some of the fallacies is as urgent and universal as most of the acts used

to illustrate instincts. The *non sequitur* is instinctive; confidence in the affirmed consequent and undistributed middle is instinctive. Perhaps the compulsions of logical thought have been disregarded under the apprehension that they reflect not *acts* of ours but properties of the world. If this is the case we should express grave doubts in the matter. Such relations as *nevertheless, if, of course, therefore*, and the like—are they not simply attitudes of ours; and what are necessity, negation, assent, but feelings which we experience?

That the laws of thought are not simply the laws of things can easily be demonstrated. Take one of the most revered and ancient of the logical rules, the Law of Excluded Middle. According to this fundamental law, one of the “axioms of logic,” a thing is *either A or not-A*. All other possibilities are excluded. Now is this law a reflection of Nature or is it merely a human propensity? Certainly it does not describe things in the natural world, for there most things are *neither A nor not-A*, but lie somewhere intermediate on a continuum. Most people are neither sick nor well, but just ailing. Most people are neither sane nor insane, guilty nor not guilty, but just semiresponsible and neurotic. Most of the time the crops and the weather are neither good nor poor, but just middling.

There is no doubt that we have a strong, universal, and apparently innate propensity for dichotomy in our speech. We act *as if* people were either saints or sinners, friends or enemies. A study of the genesis and ramifications of this propensity for dichotomy would be instructive. For example it is possible that it is not innate, but that our linguistic terms go back to early gesture language where the dichotomy was enforced because of our bilateral symmetry—we have only two hands with which to gesticulate! But our present point is only that the law of excluded middle is not an objective fact but a name for one of our deep-seated and perhaps innate propensities, one that may appear to conform to all the usual criteria of instinct. If the lists of instincts fail to handle the oughts of our logical category, it is just possible that this is only because the lists of instincts are incomplete.

Turn now to the oughts due to the demand of some Gestalt

or organization, which *requires* the act in question. The purposivist could maintain that in such instances the occasion or situation brings into play some instinctive disposition. Instincts are impulsive; they *impel* the individual to feel and act in certain ways. The presence or absence of an item arousing such an instinct would be invested with an imperative on this ground. We might say that whatever arouses an instinct becomes invested with such a character. Take a few of our examples:

"We won the game; we ought to celebrate." That is to say, winning a game arouses the instinct of self-assertion and the emotions of elation and pride, which are urgent, that is, imperative.

"This picture ought to have a wider frame." The instinct of repulsion and the feeling of disgust, which move us strongly, that is, are imperative.

"You ought to have seen him make a fool of himself." A combination of laughter and gregariousness, which would be satisfied by the presence of another witness.

"Every man ought to have two wives." A combination of instincts 6 (mating), 9 (assertion), and 12 (acquisition).

It looks as if the hormic psychology might have something here, even on the simple level of the instincts. The so-called Gestalt demands represent occasions when some one or more instinctive dispositions are aroused. Perhaps the strength of the demand corresponds to the number or liveliness of the instincts thus excited.

The oughts of esthetic sense, or taste, are equally easy to handle in this way. They involve especially the instinct of *repulsion* and that of *construction*. This results in creative activities and in the endeavor to see that others pursue creative activities the products of which are not repugnant. For McDougall this might come from two sources. Some stimuli are natively disgusting; others acquire this through modification of the first segment of the disposition, shift of feeling, and response to new stimuli through learning.

For the next category we may suppose first that social wel-

fare means the free exercise of all the native instincts, so far as compatible with the greatest good of the social group. All of the instincts are to be catered to, since they are native and universal, except in so far as the exercise of one impedes the play of another. Then there is conflict and some adjustment must be made. The oughts of social welfare indicate the approved adjustments.

"Every man ought to have a chance to work." Thus satisfying instincts 4 (protective), 9 (assertive), 11 (food-seeking), and 13 (constructiveness).

"Children ought to obey their parents." This accommodates protectiveness, submission, assertion, and perhaps repulsion.

"A man like that ought to be whipped." This appeases the instincts of escape, pugnacity, protectiveness, and submission, in one or another of the parties concerned.

But all of this is pretty loose and vague. By the same token, "Children *ought not* to obey their parents" for that might satisfy pugnacity and elation (in the children), submission (in the parents), and laughter (in the bystanders). The mere appeal to an instinct does not confer an imperative that social welfare dictates. There is the question of which instincts, whose instincts. Many oughts of social welfare indeed are calculated to *suppress* the activity of such instincts as escape, pugnacity, mating, curiosity, assertion, acquisition, and the like. Is this because other instincts are better ones? And if so, how does this come to be the case? Certainly the mere reference to a list of instincts does little to explain the imperatives of social welfare, at least in the naïve way in which we have tried it.

We can briefly say what would be found did we try to examine the other categories of ought in this way. The oughts of safety and hygiene would be related to the instincts of escape, protection, appeal, assertion, gregariousness. The oughts of expediency might be shown to exist in the interest of almost any instinct that might be set into purposive striving. The oughts of propriety could be related to repulsion, submission, gregariousness, and assertion and the corresponding emotions of disgust, humility, loneliness, pride. All of these, as we shall

later see, may be complexly involved in the sentiment of self-regard.

I find no instincts that would explain the oughts of duty or conscience as such, and none that might serve as the basis for the imperatives of justice and equity, in any obvious way. About half our categories are thus not provided for by the enumeration of the instincts and the primary emotions.

The reason is not far to seek. The instincts are self-confessed artifacts, hypotheses, invented *after* the observation of experience and behavior. They are not really influences, but only fictions or spooks in the mind of some psychologist, who wants to see how few instincts, *if there were instincts*, he could get along with. The alleged world of mental structure is nothing more than an elaborated fantasy or allegory, similar to the play of field forces pictured by the gestaltist. It is essentially demonological, that is, animistic, in trend, and is thus recognized by McDougall, who is content to call himself an animist. The subtitle of his *Body and Mind* is "A Defense of Animism." And animism is not science but primitive poetry.

The imperative of an act could scarcely be expected to be traceable to such a list of fictions or spooks, nor to their attendant emotions. Furthermore the asserted modifiability of the first and third segments of all dispositions would require that we trace most oughts and taboos back through a long genetic history before being able to relate them to their proper instincts, even if there were instincts in the supernatural realm where the enduring world of mental structure dwells.

But we have taken too naïve an attitude to do the hormic psychology full justice. Even if the instincts are the primary motives to action, with specific cues, specific feelings, and specific conative impulses, it is not these elementary trends but the more sophisticated *sentiments* in terms of which much of our behavior is to be understood (or summarized?). A *senti-ment* is not a *native* fact of mental structure but a learned disposition, a trait of *character*. It is "an organized system of emotional dispositions centered about the idea of some object."

The imperatives, it may be, are not simple records of what we are *predisposed* to do, but of what these organized senti-

ments would impel us to, sentiments developed through a long personal experience, affected by the constant interplay of persons, things, events, and outcomes. Let us consider McDougall's own account of the nature of the sentiments.

McDougall's Account of Sentiments

Typical sentiments are hatred, love, contempt, respect, friendship, self-regard. The sentiment is not an active emotion; it is a persisting disposition to have emotions of a certain kind in connection with a given object. This disposition is not innate but is due to the experience of the individual. In a fully developed sentiment the emotion concerned is not a simple primary emotion but a more or less complex or patterned emotional experience that will vary in character depending on circumstances.

As a simple illustration McDougall cites the small boy who acquires a sentiment of fear, and eventually one of hatred, for the big bully. Even when the bully is absent fear may be aroused—by the memory of him, by conversation about him, by any reminder of him. Such reminders will arouse in some degree the same emotion as would the bully if he were present. Such repeated instinctive response to the same object under varying conditions is the basis of a simple sentiment, that of fear.

But such a sentiment is likely to grow in complexity and other emotions will appear blended or otherwise mixed with the original one of fear. If the small boy is at all pugnacious (this is an instinct other than that of escape), the bully's acts will arouse his anger. Now the mere thought of him will stir in the small boy belligerence, resentment, plotting, plans to get even.

As this happens the bully becomes the effective core or stimulus of two instincts, escape and combat, and of two emotions, fear and anger. Thus is formed the more complex sentiment of *hatred*, and the impulses and feelings aroused by the bully will vary widely with the circumstances in which he is encountered or thought of.

Such sentiments persist in the mental structure, according to McDougall, as enduring conditions of instinctive and emotional activity. They organize themselves about things, people, and circumstances and become highly elaborated. Without them our emotional life would be chaotic, our activity unstable and uncontrollable. Their growth and elaboration may be said to constitute the development of character. The growth and elaboration of the sentiments are of signal importance in social life, for "our judgments of value and of merit are rooted in our sentiments; and our moral principles have the same source."

The sentiment of self-regard is seen as the most important and far-reaching. This is a compound sentiment, for it has two poles, the instinct of self-assertion and that of submission. As we build up the concept of our "self" by becoming familiar with our own body, learning to have voluntary control of our own limbs, discovering the meaning of our name, noting the reactions of others to us, and interacting with others, we begin to be aware of the meaning of the attitudes of others toward us. Praise and blame, approval and ridicule are distinguished; we learn when to be assertive and when to submit, and a normal balance of self-assertion and of submissiveness is established.

This sentiment becomes greatly extended, or incorporates much more than the bodily self. It comes to include the clothing, the houses we live in, our toys, our possessions, the work of our hands, our friends, our affiliations, the social groups of which we are members, the mores of these groups, our common ideals and principles, heroes and codes, so that all these become part of the self, and toward them are felt the same sensitive judgments of approval or disapproval. The organized and approved or ideal self becomes violated by certain things, certain acts, certain ideas, and these judgments become the most important basis of our ethical values. Especially important is the identification of the self with some particular "cloud of witnesses," tribunal, or audience, because by virtue of such identification a man can even become a martyr; that is, he can deny the current values of his associates because of self-approval based on these higher criteria.

McDougall is interested in showing in great detail how these sentiments are *responsible for* our conduct. It is clear that, if we regard them as he does, they will carry us far in such an explanation. For the sentiments are dynamic, coercive; they are based on the instincts which are the elements of purposive striving and are definitely impulsive and conative. But they do not depend on heredity, or innate structure; they are acquired by our experience with things and their characteristics and results; for each object frequently met one builds up a special sentiment, or at least for each class of object. There is not just a love sentiment, but hundreds of them in the mental structure of each man—love of country, love for Beethoven, love of father, love of equilateral triangles, love of things colored blue—each sentiment is particularized to a definite object, person, relation, class, activity, principle, and so on.

Acts, objects, propositions, and the like therefore become the keys that unlock the powerful sentiments—such attitudes as those we call honor, hatred, affection, admiration, justice, contempt, patriotism, benevolence, respect, friendship, self-regard. Each sentiment will move us with that imperative emotional tone that we feel in the “ought.”

At the same time, the sentiments become in a sense generalized; at least small parts of their original objects become potent awakeners of the sentiments. The boy who comes to hate his father feels anger and rage even when his father is not there. The mere thought of him, the image of him, a picture of him, the news that he is in the neighborhood, these details also arouse the sentiment.

Sentiments as the Basis of Imperatives

From this point of view all we have to do to explain our imperatives is to show that people have actually formed sentiments of approval or disapproval, affection or hatred, confidence or doubt, contempt or respect, and so on for the situations or acts named in our propositions. The difference between the various categories of ought is to be found in differences in the emotional pattern making up the various sentiments, or in

the differences between the various objects to which the propositions refer.

The inappropriate tool arouses *contempt*; we *dislike* the incomplete Gestalt; we *admire* the picture with the narrow frame; we *respect* the principles of justice; we *love* our fellow men and so desire their welfare; we *dread* danger and so approve the rules of hygiene; we identify given practices as those of "our people," and so *revere* them; we *honor* the law, and obey its precepts. We do these things *because* the objects or events named *arouse* our sentiments of contempt, hatred, affection, honor, self-regard, and so on. The logical oughts do not appear to be well cared for on this basis, but we shall shortly see that McDougall neatly enough provides for them. Other than this, there do not appear to be any categories in our list for which appropriate sentiments cannot be pointed out and attributed to the mental structures of our judges.

Especially important is the tendency for each item to become, in time, linked with the sentiment of self-regard, thus becoming either congenial or offensive to that elaborate sentiment, because sensed as compatible or incompatible with the self as pictured, with the ideal self, with those standards and criteria that have been personally incorporated in the extended self.

McDougall indicates four successive stages or levels of conduct. In development the individual must pass lower stages before achieving higher levels. In the lowest stage instinctive behavior is modified only by incidentally experienced pains and pleasures. Later, such rewards and punishments may be systematically administered by society. Still later conduct may be controlled by the mere anticipation of social blame or praise. On the highest stage men act under the ideals of conduct, regardless of immediate social promptings.

Perhaps we can classify our categories on the basis of these developmental levels. If we try to do this, we find actually little or no difference between the second and third levels, on which we might place our categories of Custom, Welfare, Law. On the first level might go such categories as Beauty, Safety, and Completeness. The remaining categories fit well enough on the fourth level. But it remains to be investigated whether or not

there is really a developmental sequence involved in these levels and whether esthetic, completion, and safety imperatives are really genetically simpler than those of the next level, and so on.

The category of ours that is least well provided for by McDougall's account of instincts and of sentiments is that of the logical imperative. If however we turn to his account of reasoning, we find that he has not neglected this type of experience. He gives brief and rather grudging accounts of three varieties of reasoning; particularly useful to us is the form that he calls inductive reasoning.

The simplest inductive reasoning is illustrated by the burnt child who comes to dread the fire. A single experience of an object, if it has strongly stirred us, serves to determine our subsequent reactions to such objects. Or but a few repetitions of a weaker shock may have a similar effect. This is a primitive form of generalization. We are "readily led to expect that any sequence of impressions will repeat itself when the initial members of the series recur." In the main, since nature is uniform, this tendency to react to similar things as though they were essentially the same thing again is useful. But, as McDougall points out, the tendency is at the same time the cause of some of our most serious mistakes.

This account of simple induction not only serves to locate our logical imperatives; it also gives us an adequate analysis of the formation of sentiments. For, in the sentiments also, what we find is this adoption of more or less established evaluations of things on the basis of relatively few experiences with them, and the arousal of these evaluations thereafter by situations that only partly resemble the originals. We shall have much use for this simple form of the principle later on.

It seems, briefly, that except for the rather skimpy and grudging account of reasoning and logical implication, the hormic psychology has adequately *surveyed* and *summarized* all the categories in our list of imperatives. Has it therefore adequately *accounted* for them? This is an entirely different matter, and it hinges on some of the fundamentals of systematic psychology. Perhaps the answer will strongly reflect the "complexes" of the one who makes it. Well, this is the way it seems

to me, and the valuation is of course closely tied to my self-regarding sentiment. So deeply rooted is my conviction in the matter that it seems to me that it ought to be obvious to everybody.

The instincts and the sentiments of the hormic psychology do not explain anything. An instinct, in spite of McDougall, does not *move* us. It is only a name for *the fact that we do move* in certain ways. The instinct is, self-confessedly, a hypothesis, drawn after the facts of experience and behavior are on record. It is entirely *ex post facto*. The facts may explain the hypothesis, but never vice versa. The realm of mental structure is only a realm of words—a summary, and in the case of McDougall a very astute and discerning summary, of our ways of life, but a summary that throws no illumination on that life.

Similarly with the sentiments. Sentiments do not move us. The fact that we are so likely to behave or to feel thus and so is instead what we mean by sentiment. The oughts of our categories, the imperatives of behavior, these McDougall also discovers, and he calls them instincts and sentiments, and thus endeavors to picture them as self-explanatory. Of course we have these oughts; that is where we started. But we hoped that our inquiry might lead us a little further than our lists.

Where is the likelihood of our acting in certain ways, when we are not thus acting? What could it mean for this likelihood (for that is all that a *disposition* can really mean) to exist as a dormant but enduring element of our mental structure? Does the *probability* that a hungry man will steal a loaf of bread if he has a good opportunity really exist as an enduring, tree-like disposition in some unobservable realm even when the man is well fed and contented? Or is this probability only the expression of our degree of confidence that this man will act much as other men would, under like circumstances? Even inanimate objects have their *propensities*. Wood will almost certainly rot in the ground, float in the water, burn in the fire. But the enumeration of these properties of things is surely no explanation of them.

We need not be trivial in this matter; but we may wish that the hormic psychology was not. At least it is too easily

contented ; it too readily mistakes verbal manipulation and final summaries for motives and causes. It is too prone to endow the terms it coins with eternal life, supernatural (nonmechanical) powers, and soul-derived energies. Its dispositions and their various strengths are the names of probabilities. The mathematics of probability is timeless, to be sure ; but it is not extranatural or animistic. It does not generate the facts that it counts. The hormic psychology is disappointing because it turns out in fact to be nothing but the miserable animism that it deliberately announced itself to be in the beginning. It was a mistake to hope for better things from it.

But if we make use of the *observations* of McDougall, such as his descriptions of the way induction operates and the way in which the so-called sentiments are formed, we need not abandon hope. For these observations describe the actual processes, the observed events, with a good deal of precision and faithfulness. If we are content to formulate these ways of development, and forego the realm of the Soul, which with McDougall so insistently outruns even his best observations, there is a chance that we shall find the sort of understanding of the categories that we need.

CHAPTER 4

A RE-VISION OF PSYCHOLOGY

Reflection convinced me that if I could really get to the root of the matter I should be leaving certain evils for a certain good.—SPINOZA.

The hormic psychology, it must be said, is not the only exponent of animism. The field forces and configurational strivings of the gestaltists and the valences and vectors of the topologists are also demonological. Like the demons of the ancients, the faculties of the scholastics, the unconscious of Freud, and the nerve forces of Titchener, they represent more or less personified agents, hypothetically installed behind observable phenomena. McDougall frankly admits that his realm of mind is a pure hypothesis; then straightway forgets its imaginary character and endows it with explanatory and causal power. In such cases the observed phenomena may well enough serve to explain the hypothesis; but never the other way around. Still more recently Tolman, and following him Hull, have subscribed to the curious dogma that psychology is or should be occupied with the description of unobservable "intervening variables" which it invents and locates between earlier and later stages of an observed sequence.

This type of fantasy usually then makes use of an invalid type of logical proof—affirmation of the consequent—a naïve and peculiarly offensive fallacy. The procedure is first to invent an intervening variable, say "brain traces," "instincts," "goal expectations," or "afferent neural interaction." The next step is to describe something that would result if this were a real fact instead of a fiction, and to look for this something. If it is found, the search stops, and the fiction is declared to be a fact.

Here is a fair example of such logic. If the moon is made of cheese it will have spots on it, corresponding to the holes in cheese. Now the moon actually has such spots. Therefore it is made of cheese and we can consider that question answered; for the hypothesis has been "proved" or "justified." Few children will accept this kind of proof, although they may not know the name of the fallacy it commits. But modern psychologists in some number, even those who ought to know the name of the fallacy, go ahead and gaily commit it, and suppose that they are making progress.

Affirming the consequent does very slightly contribute toward the tenability of a hypothesis. But it does this for any number of hypotheses, and does nothing to tell which of them should be excluded. Only if the consequent follows from one hypothesis, and that only, does its affirmation confirm the hypothesis. In none of the psychological instances referred to has this been the case.

In place of preoccupation with hypothetical intervening variables, or other demonological agents, we shall advocate, in common with behaviorism, a more positivistic attitude. Such an approach contents itself with descriptive procedures. Observable events are studied, in their characteristics and sequences. Generalizations and principles are formulated that summarize these data. Explanation, in such a program, consists of more complete description, and it is only with the greatest reluctance that the invocation of unobservables is tolerated. Chemistry, physics, and biology endeavor to find their unifying and generative principles within their own realms; although it is easier and more spectacular to invoke an array of spooks. There is no reason why psychology should be excused from a similar obligation.

A System of Our Own

Apparently what we need is a sound set of psychological principles—an adequate systematic psychology, if you like. By systematic we need not mean dogmatic, arbitrary, or one-sided. We mean a set of principles that formulate observed data, that

are internally consistent at least to the extent that the data are, and that do not contradict the valid principles of other sciences.

Since other psychologies fail us, we must attempt a system of our own; that is, we shall have to face the facts at first hand and see how they look to us. We shall find that nothing very elaborate or occult is required. A few very simple and easily verifiable principles enable one to apprehend the fundamental nature of mind and to interpret the varieties of behavior or conduct. I should enumerate the following as all that are really needed: two preliminary observations and three definite psychological principles.

1. An original provision for certain total responses of an organism to be made to certain total stimulus patterns. This can be attributed to the structure of the organism and can include the reflexes as well as more comprehensive activities.
2. Individual differences, initial and developmental, between organisms of the same species, class, or family. These may be attributed to heredity, variability, chance, biographical differences, and so on. Just as there are differences between species, so there are differences between individuals.
3. A satisfactory account of the nature of motives. We shall find this in the general proposition that all motives are distresses.
4. A true description of the process of learning. We shall distinguish between discovery and learning and identify learning with cue-reduction.
5. An adequate picture of the control which gives to acts the property of relevance. We shall find this in a characteristic in which individuals vary, an attribute which we shall call scope, integration, or alertness.

The first two principles, which we have called preliminary observations, are so obvious as not to require ventilation here. They apply to sticks and stones as truly as to organisms but they are more conspicuous in living creatures and constitute much of the subject matter of the biological sciences and of education. They can, I should say, be taken as starting points for any systematic account of psychological principles. They

not only make psychological processes possible but constantly condition their operation.

This would leave us, to account for, three main topics: *motivation, learning, and control*. Although we have already briefly stated the implication of each of these terms, it is necessary to give in each case some elaboration of this implication, and to indicate as clearly as we can, in so brief a space, the detailed nature of each principle and the facts on which it is based and which it formulates or generalizes. We may then be in better position to apply these principles to an analysis of the categories of imperative in something like the way we have tried with structuralism, behaviorism, Gestalt theory and the hormic psychology.

All Motives Are Distresses

For the structuralist motivation is not a psychological topic. For the behaviorist motives are whatever stimuli operate in producing overt or implicit motor and glandular changes. For the Gestalt psychologist motivation is either the unrest of an incomplete or disturbed configuration, or more likely the energy disturbance that produces a loss of equilibrium in such a system. For McDougall, as we have seen, motives are not phenomenal facts. They are the extranatural units of purposive striving, the instincts. It is to be noted, however, that these ghostly dispositions or proclivities do not act spontaneously; action does not really originate in them. Even the instincts must be aroused, evoked, or signaled by some cue from the actual world of experience (sensory datum).

There is then ground for agreement that motives are natural facts, occurring in experience, that they are in fact some of the immediate antecedents of action. The occasion of action is always some upset or disturbance in a system previously inactive or active in different degree or manner. It is this disturbance that is the stimulus. A stimulus leads to activities that tend to eliminate or reduce the disturbance it represents. The impinging energy may be conducted directly through and out of the system, as in a reflex like the knee-jerk. Or some structural

adjustment, like changes in size of the pupil of the eye, may be provided to tone down or exclude the impinging energy. Or the organism may turn away or flee from the disturbing factor. Or aggressive action upon the environment may so change it that the energy is redirected or significantly modified.

The stimulus is a distress; the reaction is calculated to reduce or eliminate the distress that is its cause. When such a distress is so persistent and severe that only some action of the organism will alleviate it, we call it a motive. Hunger, pain, shame, and poverty are good examples. Briefer and transient local stimuli also occur, episodic and concurrent; some of these are called incentives. Our most important distresses originate in our own organic conditions and in our social relationships and status. Our motives are therefore not our goals, but our goads. The things we resort to in order to relieve our distresses are not our motives; instead they are only the means or techniques which those motives induce us to employ.

Sometimes the first response to a distress is not an overt adjustment, but the formulation of a plan, a program of action, represented symbolically, that is, in thought (constructive thinking). Then the motive, the plan, and concurrent stimuli combine to constitute a *purpose*, an intention. If instead of a plan there is pictured only some outcome, some final denouement, from which distress is absent, with no formulated technique of alleviation, then we have a *wish* or desire. Even such fancied rescue (autistic thinking) may sometimes afford a mild relief of the original irritant; just as often it only emphasizes it.

This is an extremely brief, abstract, and dogmatic account of motivation. But such a statement will serve our present purpose, and the later exposition may make many matters clearer. The interested reader may find in the references cited more detailed and illustrative treatment of this viewpoint.

Learning Is Cue Reduction

Endeavors to describe the process of learning have often (usually, in fact) gone wrong under the misapprehension that learning is a change in behavior. The fact is that learning is,

instead, a change in the stimulation that is required to produce reactions of a specified kind. *Discovery*, of course, has to do with responses: one must ascertain what is the proper adjustment to a given predicament. To call this initial search and discovery learning only leads to confusion. Once the proper response has been revealed, one may then proceed to master it. But the rules for effective mastery are not the rules for effective search. In fact relatively little attention has been given to the rules for effective investigation.

The process of mastery is what is to be called *learning*. It consists of an increase in the facility, speed, or certainty with which the response occurs. Progress is due to a reduction, usually gradual, in the magnitude, intensity, or complexity of the effective cue. Cases cited by McDougall will serve us well enough as examples. His accounts of inductive reasoning, of modification of the cognitive pole of an instinct, and of the formation of sentiments are neat examples of the typical act of learning.

Birds originally frightened by noises made by guns carried by men appearing for the first time on their islands shortly became wary of the sight of men, and also of other objects and actions resembling the appearance and behavior of men. The whole original situation was no longer required to induce fright. Partial features and details became as effective as the original totals of which they once were parts, and for which they now served as signs or symbols. This was learning, that is, *cue reduction*.

The boy whose hatred was originally inspired by the despicable behavior of his father soon had the emotions of anger and fear even when his father was not misbehaving; even when he was not present. His name, a picture resembling him, his hat, his accustomed place, the thought of him—each of these fragments or details of the original complexity effectively arouses these emotions. The boy has learned to hate his father; he has, in McDougall's words, "acquired the sentiment of hatred."

If the original experience had to be repeated in its entirety for the boy to be thus emotionally aroused we should say that he had not learned anything; that he was a slow learner; that

he had a feeble mind. Learning, in these cases, consists of the facilitation of certain emotions, that is, their evocation by subtler and subtler cues. Notice again that there is no change in the response in these cases. The birds continued to exhibit fear and the boy to experience anger and fear, that is, to hate. Learning is not a change of response, and any endeavor to show that it is is misguided. Of course it is true that changed behavior may be learned; a response is, by definition, a change of behavior.

It is through the technique of learning (cue reduction) that our attitudes and evaluations become generalized and transferred. Situations which in their total character are novel do not leave us unmoved. In each there is a wealth of details, and many of these details have been features of other and different situations which we have met and learned to handle, to judge, to evaluate. These details, as cues or symbols of earlier complexities, tend to stir in us their former consequents. We judge the new on the basis of its resemblance to the old. Thorndike has called this "response by analogy."

Situations with some details, but not all, in common thus come to constitute classes. We meet the new as we have learned to meet the old, and this is generalization. Note also that it is what McDougall called "inductive reasoning." He declared it to be "both a merit and a weakness of our minds." What he meant by this will become more apparent when we consider our third necessary principle, namely that of scope or control. For a more precise and extended account of the nature of learning the references cited in this section may be consulted. Learning has been considered at such great length by psychologists that it is almost an insult to them to dismiss the topic with such brevity.

Control Is a Function of Scope

In place of a new discussion of our third principle, that of *control* or *scope*, we may make use of selected paragraphs from a more detailed exposition¹ of its character:

¹ H. L. Hollingworth, *Educational Psychology*, New York: D. Appleton & Co., 1933.

If I have been frightened by the attack of a ferocious dog, the mere appearance, in my field of vision, of another dog tends to arouse a similar fearfulness. But the promptness and intensity of this fearfulness depend on many other things as well. If the dog bares his teeth and growls, the fear tends to increase; if I see that the dog is strongly chained, the fear is reduced; if I have in my hand a strong cudgel, this helps to diminish the fear; if I note that the dog is baring his teeth in order to attack another dog, this also tones down my apprehension, or may even prompt a very different kind of excitement and interest. Normally, at any rate, the feelings that arise at a given instant are determined by the total life situation of the individual at the moment just preceding.

Here is another illustration, chosen to show that it is not our emotional behavior alone that depends on present context as well as on past experience:

Consider the behavior of a man who lives in an apartment on the fifth floor, to which he ascends in an elevator. His exit from the elevator ought to be determined jointly by several features of his experience, by a variety of stimuli. He should not try to step out until the elevator has stopped; until the attendant has opened the door; until he sees appearing on the landing the correct number of his floor; until the lady who is also ascending has first gotten out with her baby carriage; until he has first picked up his umbrella, which he has leaned against a corner of the lift.

If such a man's behavior is determined solely by one of these items, in the light of his past experience with it, but without due regard to the other items occurring at the moment, he is likely to get into trouble. He makes mistakes; he gets a reputation for being "absent-minded"; if the condition is severe and chronic he comes to be known as a *neurotic*, or at least as an impulsive and unsagacious person.

Such observations as these introduce us to the concept of mental control or balance. By control we mean that normally action and experience are the joint product or resultant of the many influences, cues, or determinants that confront the individual at the moment of action. The various stimuli act as mutual controls, so as to produce behavior suitable to the situation as a whole. Action determined in this way we call relevant, appropriate, sagacious. . . . Without learning, none of

these cues would be effective. But . . . they must be permitted to operate jointly, to control *together* the ensuing behavior, if this behavior is to be normal and appropriate.

In this integrative characteristic, which may be called by a great variety of names, such as insight, sagacity, alertness, control, but for which we prefer the term *scope*, individuals differ in what appears to be a constitutional way. A given individual also has moments in which he departs, particularly downward, from his usual level of integration. Such factors as youth, ignorance, fatigue, worry, distraction, sleepiness, certain drugs, have unbalancing influences in this respect.

Redintegration, or cue reduction, which is responsible for learning, and integration, or scope, which is responsible for control, these are the two primary factors underlying that net efficiency of action which we call intelligence. A certain moderate degree of both these primary features is what is characteristic of the healthy mind. Deviations in either the up or the down direction make for abnormality. Some psychological accounts might consider this topic under the head of *attention*. A more detailed account of the importance of scope as a feature of mental endowment may be found in the references.²

It should be pointed out, furthermore, that the importance of scope depends in final analysis on prior learning. It avails little to be alert to the many items presented in a given context unless the significance or bearing of these items has been learned through earlier experience. What is important is not so much that *everything* in the present context be taken into account, but that no items that are *relevant* to the initial problem be ignored. Knowing the relative importance and relations of all of the items encountered depends to some extent on momentary perception, but to a large degree also on previous acquaintance. But it is only when scope is adequate that sig-

² The author has presented more detailed accounts of motivation, learning, and control in the following volumes: *Psychology of Functional Neuroses*, New York: D. Appleton & Co., 1920; *Psychology, Its Facts and Principles*, New York: D. Appleton & Co., 1928; *Abnormal Psychology*, New York: The Ronald Press Co., 1930; *Educational Psychology*, New York: D. Appleton-Century Co., Inc., 1933 (the best account).

nificant items can count for anything in determining action or thought. Learning without scope results in neurosis; and scope without learning produces the scatter-brain type of behavior.

Driving a car provides a fair example. Anything in the landscape may be a possible menace. There are dangers in front and behind, to right and left, on the ground below and in the sky above. He whose scope is so limited as to ignore any of these directions courts disaster. Still, objects in the environment do not all have equal importance. The relative significance, that is, the relevance, of stationary houses, moving trucks, of trees, clouds, pedestrians, parked cars, holes in the pavement, must be known through previous acquaintance with them. But for this knowledge to be useful the driver's scope must be adequate to comprehend all these objects.

Pleasure Is Relief from Initial Distress

From the foregoing considerations a very important result follows. A stimulus or motive, as we have seen, is an irritant that leads toward adjustments that will eliminate or reduce it. The motives are such things as aches, pains, itches, shame, envy, insult; action always starts with some such disagreeableness. The disappearance of such an irritant gives us the experience that we call *pleasantness* or *agreeableness*. It is more commonly taught that both pains and pleasures are positive motives, that men seek pleasure in fact, as well as shun the disagreeable. This would be like treating clouds and clear spaces in the sky as equally fundamental. But clear skies are mere emptiness; it is the clouds that thunder, lighten, and rain. Action, in other words, often *terminates* in pleasure, for pleasure is the disappearance or reduction of distress. But pleasure never initiates action.

Furthermore, once situations have come to be known for their distressing or their relieving properties, it is not necessary wholly to relive them in order to get these properties in experience. The technique of cue reduction makes it possible to get

appropriate feelings from very partial aspects or fragments of the original. It also results in similar feelings from contexts which only in part resemble the originals.

The relevance or propriety of such induced feelings will, as we have seen, depend on the sagacity or scope of the observer. Very often slight details will provoke valuations (prejudices) that are not justified when the actual facts are fully taken into account. Imperatives may be felt, in other words, which more careful consideration might dispel, or which though justified by past experiences are not appropriate to present contexts.

Finally, although life is a constant flight from irritants, the mere absence of distress is not what is meant by happiness, nor does it bring contentment. Pleasure is not the absence of a distress but the experience of its diminution or destruction. Happiness is a condition resulting from a ready repertoire of techniques for effecting such relief. Mere absence of motives is sleep or, more strictly, it would be death. But a flow of distresses, for the management of which one is always ready and prepared with adequate adjustments, this is the basis of a happy existence. So true is this that those who have acquired adequate techniques for handling predicaments often invent or go far afield in order to find predicaments which they can get pleasure from mastering. The significance of these observations will become clearer as we proceed.

CHAPTER 5

VARIETIES OF OBLIGATION INTERPRETED

We must bear in mind that the terms *good* and *evil* are only applied relatively, so that the same thing may be called both good and bad, according to the relations in view.—SPINOZA.

Logical Imperatives Again

We have now three effective principles to apply to our array of oughts. All acts are motivated by a distress, which it is their role to reduce. Cues function not only natively, in their own right, but especially as ideas, that is, effective signs or symbols of contexts of which they have in the past been partial constituents. The effectiveness of an act is determined not only by the cues of past contexts, which give meaning, but also by cues of the present situation, which give relevance. Distress, cue reduction, and scope—these are our three principles. They are more commonly known as motivation, learning, and control.

What light do they throw, first, on the oughts of logic? According to the logician the premises of a valid syllogism *imply, point to*, the conclusion, and this implication is the imperative. Now what is the actual psychology of implication? Take the statement "It is a clear morning; we ought to have a fine day." Logically elaborated this is:

Clear mornings are followed by fine weather.

This is a clear morning.

So the weather will be fine today.

This is an ordinary deductive argument. What happened was that the speaker awoke, looked out of the window, and said "Hurrah!" The "Hurrah!" conveniently sums up the

way he felt, the preparations he began, and the verbal report he made to a listener—his affective, postural, and symbolic activities. These acts (conclusions) were directly evoked by the morning, without the presence of any so-called "middle term." But only in the light of his past! Some attribute of the morning has habitually been part of total contexts involving "Hurrah!" reactions. Thus the clearness of the morning, before its own present context (the rest of the day) is even developed, evokes such a reaction, a "fine day" reaction. There is something about this morning that leads to his "Hurrah!" or, more sedately, to his verdict, "This will be a fine day."

This verdict relieves his initial distress, which was a doubt, a query, perhaps a mild fear. This is really the elementary process which McDougall pointed out as underlying "induction." We come to react to new samples in the ways we have previously reacted to other specimens, that is, to expect them to have similar properties, to belong to a class, to justify a generalization. Or, in McDougall's terms again, the individual has developed a simple sentiment of approval for clear mornings.

If the speaker be asked now to *prove* his conclusion to some skeptic, he cannot exhibit all these historic episodes, all of the past experiences of clear mornings followed by the "fine day" enthusiasm. They are buried in his past. They are simply in his biography, but the skeptic, if he could be led through such a biography, would react in approximately the same way (barring individual differences).

The nearest he can come to this is the assertion, "All clear mornings are followed by fine days," asking the skeptic, in effect, if his own biography has not been like this. If the answer is "Yes," that means logically, "The major premise is established." And when attention is now called to the clearness of the morning (minor premise) the skeptic may be expected to sympathize with the "Hurrah!"—that is, to accept the conclusion.

For the premises imply, imperatively demand, coercively lead toward the conclusion. The subject of the conclusion and also of the minor premise has some attribute that, as part of former contexts (the middle term), leads effectively to some

consequent (predicate of the conclusion). Whatever distress, doubt, uncertainty the earlier verdicts achieved will be felt to be relieved by the present verdict.

We should add that the relief afforded by the verdict will depend in part on whether the present situation as a whole is really not too different from earlier contexts. Scope for the present context also determines validity, in the sense of appropriateness. If the earlier experiences were on the plains, and the present occasion is on a mountain-top, and this difference is overlooked, the verdict may be actually wrong in spite of its customary or formal correctness. Clear mornings, on the mountain, may have less uniform consequents.

Grammatically this means of course that the major premise should be revised. It should become "Clear mornings are sometimes followed by fine weather." But this is to say that experience has established no unequivocal reaction to clear mornings. Hence the reaction to this morning would be undetermined, so far as the item of clearness is concerned.

In terms of formal logic this would mean that the universal of the major premise (all clear mornings) has become a particular (some clear mornings) and the "middle term" is *undistributed*, a condition which yields no conclusion, as we have already intimated. To draw a conclusion would be to commit a fallacy, the fallacy of undistributed middle. And so we see that logical fallacies result from inadequate scope and are, as it were, a kind of neurosis.

In brief, then, the obligation of logical necessity is based on the effective operation of a distress; the arrival at the conclusion is made possible by the effectiveness of a reduced cue which functions adequately for earlier contexts or experiences; and the validity of the conclusion is to some extent at least contingent on the scope exhibited at the time it is made.

Fallacies in Normal Perception

We might add here the observation that so far is logic from exhibiting the actual process of thinking that all normal perception commits the fallacy of "undistributed middle," and yet

we get away with it and handle the environment fairly well. The child, sitting on the floor, springs up in glad anticipation at the sound of footsteps and cries, "Papa, papa!" And usually it is papa, but not always. Put into a syllogism, the baby's acts would be:

When papa comes I hear footsteps.

Now I hear footsteps.

Papa is coming.

But the middle term is undistributed in such a syllogism, hence the baby always commits a fallacy when he gets ready for papa. However this may be, this is the process involved in all perception, and without it there would be no such thing as perception. And the actual processes of thinking follow a similar pattern.

The imperative of logic is therefore the effectiveness of a sign, the power of a symbol. We meet Socrates for the first time and say "Ah! He will die!" Something in Socrates is a sign of his mortality. This signature value comes from previous experience with or records of creatures of his class and their destiny. It is the *humanity* of Socrates that evokes the verdict "He will die." When the grammarian asks us to put all this on the blackboard in the form of declarative sentences (propositions) we get the famous syllogism.

But the syllogism is only a monument, erected to commemorate the thinking that preceded it. The logical imperative is but the formal record of the power of a symbol to evoke a reaction that originally followed a more elaborate context. For that context the symbol is now a surrogate; this makes the symbol an idea, a thought, and enables us to develop a sound account of the psychology of meaning.

In any meaningful situation there is always the sign (detail), the signified (past context), the signifying (evocation), and the significance (reaction). The awareness of the *evocation* might therefore be said to constitute the ought of our logical category.

The fact that the symbol evokes the consequent in the light of earlier contexts is what McDougall meant by the synthesis of two dispositions by means of the middle term. And that is

what the gestaltist meant when he said that an incomplete Gestalt tends to complete itself—the symbol operates in the same way that the original context would if it were possible to resurrect it.

Gestalt Mechanics

How do our principles apply to the category in which some pattern or Gestalt calls for completion or correction? The Gestalt rule that an incomplete or inferior figure strives for perfection is a picturesque reading of the results. Consider some of the cases of such alleged completion. When a word with one or more letters missing is seen, it is read correctly, that is, *as it would be if* all the letters were there. But the missing letters are not supplied, the pattern presented is not supplemented! When one part of an object falls on the blind spot, in monocular vision, no gap is seen; a red field is seen as continuous red, a blue field as an uninterrupted blue expanse. But of course no red or blue is produced to fill the gap. *Nothing* is seen by the blind spot, not even a gap!

In such propositions as

You ought to have seen him make a fool of himself.

We won the game; we ought to celebrate.

it is clearly recognized that the gap remains, but that it could however be filled in such and such a way. There is no doubt that incomplete patterns are disturbing, annoying, distressing. Often the individual acts *as if* they were complete. He reads the word *as if* it were all there; he sees the field as he would *if* it were all filled in. That is, he describes the pattern as he would *if it were* completely there. The Gestalt that he reports is more complete than the one presented. He has learned to react to *hints*, and hints are only *fragments*. There is no *completion* of the *stimulus*, but the *response* approximates a former total reaction.

This is just what is done in our sample statements. The “ought” indicates the missing detail, supplied not by the striving of the incomplete pattern, which remains inert, but by the

speech habits, the reading habits, the thought habits, of the speaker.

"If you had been there," it would have been perfect.

"If we now celebrated," that would finish up this business.

In general we may say that we tend to *state* things more completely than we experience them, or than we remember them. Our reports of incomplete patterns are often better rounded out than the patterns themselves were. In children this tendency is often laughable. They draw profiles showing both eyes, and skirts or table tops with legs showing through. They tell what they did to So-and-So, when actually they fell far short of the whole exploit as reported. The general law of perception is that we react to parts in the ways in which we have previously reacted to wholes.

This appears to be all there is to the Gestalt demands, and it is another example of our principle of cue reduction. The incomplete is unsatisfying, that is, distressing. We emphasize what the whole *would be*, if completed. The ought, the requirement, is only the realization that part of the picture *is* missing and of our firm resolve, or our inveterate habit, which leads us to act *as if* it were not.

Whether, isomorphic with this custom, there are configurations of stress in the brain tissue that really work themselves out to completion, who knows? But it is much more likely that brain patterns, if there be such things, also respond to reduced cues, just as the organism as a whole does. In that case we simply find that neurones and people both illustrate our principle, and we have a little isomorphism of our own.

Among the imperatives of the Gestalt category as we have considered it belong a good many statements that contain what might be called *oughts of opportunity*. Some plan or some project is being considered, a journey, an entertainment, a landscape. There seems to be a felt danger that some item that naturally *belongs there is likely to be omitted*. A friend is going on a western trip and is telling of the projected stopping points. "But," some one interjects, "you ought to stop off at the Grand Canyon; you ought to see Yellowstone Park;

you ought not to miss Banff and Lake Louise; you ought to make a side trip to Vancouver."

The oughts of opportunity are quite like the rest of the Gestalt imperatives. A trip or project is pictured, and it is felt that it would be "just too bad," that "you will later be sorry," etc., if such and such is done or is not done. As a mere description, the fulfillment of an incomplete or an inadequate pattern fits these cases. But actually, psychologically, and causally considered, the ought indicates some item that would alleviate or prevent the distresses of "too bad" and "regret."

Summarizing the bearing of our three principles on this category, the ought of the Gestalt is the appreciation of a subjective want, lack, or annoyance, not of the structure concerned but of some person. The item that it indicates is named as capable of alleviating this irritant. It may be indicated as merely missing, or instead as being replaced by some inadequate substitute. It also affords a neat example of our principle of scope, for the correctness or fitness of the item named is clearly determined by its relationship to other items in the situation. Context, in this sense, is important, and it is this fact which gives the specious appearance of achievement to the concept of field forces. Finally the results construed by the Gestalt principles as supplementation, closure, and the like really represent the effective operation of reduced cues in the reports given by some individual; they do not refer to the activities of the structures themselves. Gestalt phenomena, in other words, lend themselves to description in terms of motive, learning, and control (distress, cue reduction, and scope).

Back to Esthetics

The oughts of esthetics are clear cases of the report of things as pleasant or unpleasant in their own right, that is, without regard to any practical use that is to be made of them; without regard to their expedience. It is surprising what slight differences in quality or pattern can produce such feelings. The ought indicates the situation, materials, or arrangement that

would afford the least distress. So immediate and direct are these pleasures of taste that they are sometimes cited as a formidable objection to the doctrine that all pleasantness is based on relief.

The annoyance or relief in many such instances certainly is far from apparent, and the pleasure may appear inexplicable. A few hours after birth an infant sucks contentedly at a sweet stimulus but makes a wry face at a bitter one. Just making a noise, or threshing about, seems to afford some kind of pleasure to a child, and according to our account such pleasure must always involve relief from some irritant. What is the nature of the irritant in such cases?

It seems to be true that to have a power, like shouting, or an organ, like the ear, and not to exercise it, is basically irritating. Certainly for a well and able-bodied man not to be able to use his muscles is annoying. Relief from such distresses may be back of many of the things that we do or experience "for sheer pleasure." It may be going beyond the facts of observation to assert that in all cases of these simple and direct preferences the irritant of inactivity, of ennui, is present; something like that seems nevertheless to be the case.

This seems to be true of our sensory powers as well as of our muscles. It has been said that "The eye hungers for light, the ear for sound, the hand for surfaces, the arm for things to reach, throw, and lift." This may sound like personification but it is a brief and apt way of saying that a healthy sensory mechanism, when long deprived of its normal stimuli, becomes the source of discontent in the organism to which it belongs. In much the same way a constructive instinct craves something to build and curiosity is restless unless there is a problem to be solved. In the words of Dewey,¹ "Each impulse is a demand for an object which will enable it to function. Denied an object in reality it tends to create one in fancy."

A similar recognition of this principle in somewhat more physiological terms is found in Thorndike's statement that "When a neuron is ready to function, for it not to function is

¹ J. Dewey, *Human Nature and Conduct*, New York: Henry Holt & Co., 1927, p. 140.

annoying." At any rate the pleasures of taste fall neatly enough under the proposition that we enjoy doing the things we are ready and fitted to do, and this is no violation of our general principle.

"Empathy" is another explanation given for the feeling tone of objects, acts, designs and arrangements. The observer is supposed to sway slightly with a swinging pendulum; to brace or bow before the heavily loaded pillar; to beat time or breathe in rhythm with the dance or melody; to assume an unbalanced posture or pattern of muscular stress before the arrangement that is unsymmetrical, out of proportion. These reactions are distressing or relieving and the *feel* which comes from them we are said to project into the object, thus reporting *it* to be unsatisfying, graceful, to clash or to harmonize. In such cases the ought indicates the details or qualities that would free us from a miserable empathy, yielding a more pleasing one. In such cases the ought might be said to arise from this empathic tendency. It shows how the observer would feel, what demands he would make, if *he* were put into the posture of the object looked at.

Somewhat more speculative is the theory that we always put ourselves tentatively in the act of *handling* the pattern or design we observe. If we could grasp it at a single point and it would "hang together," the design would have unity, that is, one handle. This suggestion comes close to using the principle of reintegration or cue reduction. The design is not really a three-dimensional, solid thing; it is a flat grouping of lines, perhaps. But we react to this spatial pattern as we have in the past reacted to solid objects with similar spatial pattern, and our verdict is that the thing is manageable (free from trouble) or unmanageable (distressing).

Perhaps one of the most important sources of the feeling tone of esthetic products was described by Edmund Burke nearly 200 years ago. In his "Philosophical Inquiry into the Origin of Our Ideas on the Sublime and Beautiful" he points out first that "Objects affect us by the laws of that connection which Providence has established between certain motions and configurations of bodies and certain consequent feelings in our

mind." These are what we have called the inexplicable or native responses.

But he finds a second law, illustrated by the power of words. Words as mere sounds have their own immediate affective values, but they also have, as poetry and oratory strikingly show, feeling tones much more powerful than these. And, he says, this feeling tone does not come from the word's power to arouse an image of some object and borrow, as it were, the tone of that image or of the object of which it is a picture. Instead, this tone arises by a process which he calls "substitution":

Words are in reality but mere sounds; but they are sounds which, being used on particular occasions, wherein we receive some good or suffer some evil, or see others affected with good or evil . . . they produce in the mind, whenever they are afterwards mentioned, effects similar to those of their occasions.

Or in terms of our own principle of redintegration, words, as partial features of larger contexts, become freighted with the distress or relief of those contexts. Most of the moving power of words in poetry, song, oration, as well as in ordinary discourse, comes from such a source. That is, in fact, the import of the statement that words have meaning.

The observation need not be limited to words. Lines, masses, spaces, ornaments, colors, tones, shadows, rhythms, tempos, musical phrases, timbres, gestures, postures, facial expressions—all the materials of esthetic manipulation become powerful symbols in terms of our experience with them, in terms of their past contexts. And since, as Burke insisted, these original occasions need not be imaged or otherwise remembered or reproduced, the feeling tones are attributed directly to the materials themselves.

Far back in the history of the race these redintegrative reactions may be traced. A comrade's garment, the crudely drawn picture of an enemy, the weapon of an ancestor, arouse elaborate emotional patterns wholly unexplained by the mere stimulus that suggests them. The antlers of a hunted animal, the statue of a hero, a brass button from a battlefield possess their special

virtue through this mechanism. The kiss, the embrace, and other varieties of tentative caress, as well as more servile forms of homage, derive their power in similar fashion. Reduced cues arouse emotions ordinarily accompanying more fully executed attitudes.

Many devices of patriotic enthusiasm and of religious devotion depend on this redintegrative power of slight cues. The thrill of piety is aroused by slight details of the original setting, by the hymn, the cross, the candles, the incense. In this way the drum, the flag, the bugle call, the martial air achieve their symbolic meanings. The basis of the esthetic imperative is usually not to be found in the materials manipulated. It more often dates back to what Burke called "particular occasions wherein we received some good or suffered some evil." Or perhaps not we (as he also intimated) but some one, and the conventions of instruction and usage in the fine arts make some of these elements into an alphabet of approved procedures. The poet Masters, in "Domesday Book," states the principle in the following verse:

And those must suffer most to whom the sounds
Of music or of words, or scents or scenes
Recall lost realms. No soul can understand
Music or words in whom there is not stirred
A recollection . . .

To go into these details would take us deep into the problems and into many of the misapprehensions of esthetics. We seem to have gone far enough to see that, as we said in the beginning, the oughts of esthetics indicate particular ways of relieving specific, though perhaps unidentified, annoyances, discontents, unrests, and irritants. The degree of the imperative may be a function of the intensity or universality of the distress in question.

The pleasure of the esthetic object is to a large extent then a revived pleasure, a faint or weakened replica of a grosser pleasure found in some or many former occasions, when the present details, or some of them, were also operating. It is a general rule that redintegrative responses tend to be less in-

tense, less prompt, less complete, than the historic response to the original context. Esthetic feelings are for this reason and to this extent mild and not profoundly moving or violent, so gentle indeed that they require careful cultivation and many people remain apathetic to the appeal of the fine arts. For the esthetic response is not a reaction to the artist's materials, immediately and in their own right, although it is still true that the response is not in terms of the present practical usefulness of these materials.

Higher and Lower Senses

Although it may appear to be an unexpected result, the materials preferred for esthetic manipulation and most employed by the fine arts do not produce sensory qualities that have in themselves the greatest immediate affective value. Experiences which have this are said to belong to the "lower" senses, not to the "higher" senses through which the artistic appeal is made. Tastes, smells, contacts—these immediately provoke definite and intense feelings—of disagreeableness, perhaps, or of excitement, tension, pleasantness, or relief.

The odors of hay, coffee, flowers, the smell of animals, spices, herbs move us to strong feelings. So do the stroking of fur, the cool of evening, contact with another's body, the warmth of the sun. Such immediate feelings are likely to be stronger than those similarly provoked by colors, forms, noises, or arrangements in the "higher" sense fields. Disagreeable odors, tastes, contacts we cannot endure, but few are the sights and sounds to which we cannot become reconciled.

Here is the paradox, then. Sense impressions possess esthetic value in direct proportion to their failure to arouse in us immediate feeling tone, in their own right. It is in so far as they *do not* produce immediate pleasure and aversion, *do not* arouse instinctive emotions of joy and disgust, *do not* stir up in us moods of irritation and acquiescence that they declare themselves adequate raw materials for the use of the fine arts.

We should hope to find some sound explanation of these

facts in the light of our present analysis. And the explanation is obvious enough:²

It begins now to appear that only those senses can become esthetic vehicles which somehow lead beyond themselves, beyond the immediate gratification of the individual, and facilitate some sort of social participation, co-operation, or conference. We do not of course mean that the lower senses are unesthetic because they minister mainly to our personal and immediate physiological needs. Nothing could be farther from the truth. It is not because taste, smell, touch, and kinesthesia are mainly concerned in telling us of facts that are of vital importance to us as individuals that they are low or unesthetic. It is only because they do nothing *more* than this; because they cannot become the vehicle of our individual and social conference and communication. . . .

There is some further reason why the esthetic sense qualities are those genetically the most recent, in imagery most clear and enduring, pertaining mainly to the distance receptors, markedly susceptible of systematic and organized description, relatively free from immediate feeling tone, and informing us of objects on which consistency of report is great.

The reason seems to be that the main thing about an esthetic presentation, arrangement or composition is, after all, its symbolic content, its "meaning." The artist desires above all to eliminate our own immediate and native reactions to his materials; he does not aspire merely to decoration. In so far as he is an artist, he is not satisfied with the relatively easy accomplishment of presenting to us a pleasing array of sensory qualities and patterns.

His main concern is in communicating to his observers an intimation of some situation, some theme, some state of affairs, some purely relational fact, some *meaning*. Such emotions as are stirred in us he does not wish to come from his mere materials, but from his own manipulation of them, from the form and pattern which he gives them, from the past contexts which they, as trivial details, represent, from the meaning which he thereby conveys to us.

The artist therefore works under the limitations of the principle of cue reduction (redintegration). He strives for significant symbol, not for native feeling tone. As distinguished from the entertainer and the mere decorator, the artist requires cues which derive their power not from the past of the race so

² H. L. Hollingworth, *Psychology, Its Facts and Principles*, 1928, pp. 460 ff.

much as from the history of the individual. Such materials however must be chosen from fields of common experience and must be easily accessible to others. The artist is likely to depend more and more not on the bare items of his material but on their relations, on the pattern and arrangement or sequence that he gives them. Their native feeling tone is thus more easily buried in the significance that they derive from particular and more recent contexts which differ considerably with varying cultural circumstances.

Art and Neurosis

Before leaving the topic we may briefly consider an oft-voiced suspicion that esthetically sensitive individuals are usually neurotic. Of course ordinary folks have *explained* artists in numerous ways, usually to their disadvantage. They have been said to be degenerate, infantile, unbalanced, epileptic, immoral, impractical—almost anything uncomplimentary for normal, work-day purposes. We might well have added to our list of imperative statements, "To be an artist one ought to be unbalanced." What is the basis of these apparently malicious and obviously exaggerated assertions? Is there any truth in them? Do the artist's responses in any way resemble those of the neurotic?

It is easy to see how these beliefs have arisen. There is indeed some resemblance! In the esthetic response one is carried away by the power of the present detail—the curve of a vase, the chroma of a rainbow, the subtle nuance of tone, the delicate turn of a line, a phrase, a gesture, a cloud, a flower, a face. Ignoring its present setting, the detail overwhelms one with the feeling tone of its past contexts, and one is momentarily oblivious to the present context in which the detail is embedded, to its practical relations, its common-sense connections.

It is *lowered scope* that allows the poet's heart to leap up when he beholds "a rainbow in the sky." *Further consideration*, that is larger scope for the present setting, would reveal that this is only the differential refraction of light rays by the

curved surfaces of water particles and that the day as a whole is really just a miserable mess, nothing to get jubilant about.

But this is also the picture of the neurosis! If overindulged and allowed to involve the individual's important responsibilities to his fellows, it does make the artist unbalanced. So long or so far as the condition is restricted to his autonomic or affective activities we do not bring him to the clinic, but smile tolerantly at him and perhaps enter sympathetically but cautiously into his enthusiasms. It is still true, however, that if you wanted in a hurry to find an artist or an esthetic soul, the last place to go would be a neuropsychiatric clinic, an epileptic colony, a home for the degenerate or delinquent. But you would occasionally find one there, for there is a common psychological pattern in the imperatives of the artist and the compulsions of the neurosis, just as there are common elements in the flicker of a candle and the burning of Moscow or the flames that seared Coventry.

For the Common Good

As a reminder of the nature of this category, here are a few of our samples.

Persons who are closely related ought not to marry.
 Every man ought to have a chance to work for his living.
 Some cure for that disease ought to be discovered.
 Capital punishment ought to be abolished.
 One ought not to take revenge into his own hands.

There is in such imperatives no emphatic evidence of any specific personal distress, unless it be discontent with things as they would otherwise be; and such distress is real enough. But the emphasis appears rather to be on the distress of others, of those concerned, or with the general welfare which would of course include that of the speaker. For the distress of others or the ills of the social order to become a motive may seem at first to require more than our principles provide, for how do they account for the phenomenon of sympathy?

The facts are simple enough. Sympathy means feeling with

others. It is to "Rejoice with them that do rejoice, and weep with them that weep." And this is more than a mere imitative process. We sympathize with those who suffer in ways that we have suffered. Cues from their situation or behavior—their plight, their sobs, their limping gait—serve to reintegrate in us the anguish we endured when we too exhibited those symptoms. The dog who hears a wailing noise is thrown into a distress similar to that when he himself wailed, and heard his own lament. This reintegrated hurt is enough to set him wailing sympathetically, even if the stimulus is only a fire siren. The distresses of others really hurt us, if they suffer in ways we know. And the prospect of their suffering, the mere contemplation of this as imminent, may be enough to make us discontented and apprehensive. Perhaps there is also in some of us a general kindliness and benevolence, but such tenderheartedness is different from sympathy. Only he who has himself suffered great loss can truly sympathize with another's grief. Our concern for social ills turns out after all to have a distinct reference to our own peace of mind.

Cue reduction is thus enough to arouse in us a genuine concern for the salvation of others. The common welfare becomes our own, and it is those who have hungered, grieved, been injured, defeated, insulted who are most likely to take the general welfare to heart and to become agitated over its safety. Revolutionists and the leaders of revolts rise from the ranks, and the most zealous reformers and preachers are those who have themselves felt the consciousness of sin. He who runs may see the reason why the Democratic Party is strongest in certain regions and with certain groups, and why it was this party rather than any other that sponsored the New Deal.

Endeavors to interest philanthropic agencies and foundations in the conservation and development of our resources of ability and talent invariably encounter difficulty, depending on precisely these facts. Of such difficulties one who was especially active in the interests of bright children wrote as follows:³

³ Leta S. Hollingworth, *Public Addresses*, Lancaster, Pa.: Science Press, 1940, p. 100.

In rejecting an application for funds to study the education of gifted children, an officer of the foundation approached stated that such projects were not approved by his Board, "because the attitude of the Board was philanthropic." By this was meant that the Board favored projects fostering the weak and erring. Thus has the word "philanthropic" been corrupted to mean love of the dull and vicious man. Against this misuse of the concept those interested in hereditary strength should protest, and should insist upon including also strong, ethically minded and intelligent persons within the "love" which the word originally signified.

Why is it that agencies concerned with "relief" are so wholly preoccupied with the sick, the idiotic, the crippled, the delinquent, the hungry, and the wounded? Obviously because sympathy is what lies behind the agencies of relief. And the only kind of relief that can be clearly conceived by their sponsors, who are in the long run average men, is relief from the kind of misery that average men know. The sorrows of the child of high I.Q., compelled to spend his time copying the multiplication tables while what he most wants is to be allowed to read Newton's *Principia* or to search out incorrect statements in the *Encyclopaedia Britannica* are wholly unknown to such men. How then can they sympathize with such sorrows? Since individuals capable of such sympathy are few, we can expect that philanthropy will always be preoccupied with the least lovable of all.

Sympathy is, of course, not to be confused with pity. In sympathy the actor's distress is similar in quality to that of the beneficiary, although usually weaker in degree because provoked by a reduced cue. In pity the spectacle of the sufferer arouses in the observer a distress not like that of the sufferer, but prompting to conduct which may relieve the misery of both. The spectacle may present the pangs of hunger and poverty; in pity the observer experiences a compassionate regret which the alms he gives helps to assuage. The philanthropist may of course be actuated either by sympathy, or by pity, or by other motives; but in any case his beneficence is a way of accomplishing his own inner complacency. A simple illustration of this is given in the following episode from May

Sinclair's *The Rector of Wyck*. Two girls pass a beggar, and one drops pennies into his cup. The following dialogue then ensues:

"It's all very well," said Susan, "but you only give him pennies to please yourself, so that you mayn't feel too uncomfortable when you pass him."

Matty stared. It wasn't like Susan's gentleness. She had never come out with anything so sharp as that before.

"I wonder."

Matty really wondered; she considered it carefully, trying to see clear through her own motive. She was conscientious about everything.

"I think," she said, "I really did it to please him. I couldn't bear to think he was looking for the pennies and they didn't come. That would make me uncomfortable."

Although sympathy and pity are distinguishable, they may occur together and this is perhaps what happened in the above episode. But the recognition of the motive as the distress of the actor is recognized by both of the speakers. Matty became a philanthropist in order to relieve her own discomfort.

Varieties of Utopia

So much for the topic of sympathy. What we have said may be neatly summarized by the story of Abraham Lincoln and the pig that he helped out of the ditch. "On being praised for this action Lincoln is said to have replied that he did it not for the sake of the pig, but rather on his own account, in order to rid his mind of the uncomfortable thought of the animal's distress" (Mackenzie, *Ethics*, p. 60). We turn now to another important point, namely the nature of purpose.

We have so far seen only that social ills, that is the difficulties of people in general, may become personal distresses and thus the basis of an imperative demand. But such situations have also another peculiarity. Except for occasional dictators, and millionaires in the good old days before a group of wounded people put the New Deal into operation, individuals can do little at any given moment to ameliorate social conditions. They are limited to the making of plans, to the ad-

vocacy of measures, to agitation for reforms that could only come slowly if at all.

Now when a distress leads first of all to a *plan*, a symbolic technique of relief, a pictured solution, which is not or cannot be immediately executed, we have a purpose. This is precisely what a purpose is: a distress arousing a tentative plan or blueprint of procedure, rather than an immediate adjustive act. In a closely related case the distress leads instead to a picture of some denouement, some outcome, some changed condition of affairs in which the distress would no longer exist. This is a *wish*, or a *desire*, as distinguished from a *purpose*. A desirable end is pictured rather than a technique of procedure.

Utopias are of two kinds. In one this technique of wishful thinking is employed. A "heaven" is pictured in which "There shall be no night." We may call these the autistic utopias. In utopias of the other type, which might be called constructive, it is purposive thinking that is employed. Steps are formulated which might lead, not to a heaven in which there is no misery, but to a present world, with misery reduced and better techniques of handling such distresses as may be inevitable.

The oughts of social welfare fall into one or the other of these classes. Either they designate the kind of world in which certain more or less clearly recognized ills (feebleness, hunger, disease, cruelty, juvenile delinquency, vengeful acts are the ones concerned in our sample statements) would not be, or they indicate specific changes or techniques (not marrying relatives, abolishing unemployment, discovering serums, lengthening the school term, etc.) for distresses that would be clearly enough recognized if the statements were elaborated.

"Some cure for that disease ought to be discovered" is an example of the autistic imperative. It prays, not quite for a world in which disease does not exist, but at least for one in which disease shall cause no havoc.

"Persons closely related ought not to marry" is a more purposive imperative. It points definitely to a practice, perhaps to a law, which if enforced would, it is believed, reduce the likelihood of undesirable traits being emphasized by double heredity.

The difference is important. Autistic imperatives terminate in an ecstasy; purposive imperatives get things done. And observe that, in contrast to the hormic psychology, we have not had to devise a soul in order to give an account of purposive behavior. Purposes are real, and they are effective, but they exist not in a hypothetical realm of mental structure but right here in the middle of our experience. They are not ghosts or spooks or demons or hypotheses, but genuine forces. Aroused by a distress, the plan combines with that distress to determine the character of later acts calculated to relieve the initial predicament. We shall find use for this fact in a later connection when what we call *ideals* come to be important. For an *ideal* is a very generalized and inclusive plan that may be brought to bear on a great many different acts of an individual.

In general then, the imperatives of social welfare, which appear to originate in the distresses of others, do so chiefly by the arousal, through sympathy and the technique of cue reduction, of distresses in the actor. Two of our fundamental principles are thus combined. Scope and the nature of the context that functions determine the difference between autistic and purposive solutions.

CHAPTER 6

INTERPRETATIONS CONTINUED

As for the terms *Good* and *Bad*, they indicate no positive quality in things regarded in themselves, but are merely modes of thinking, or notions which we form from the comparison of things one with another.—SPINOZA.

Expedience and Utility

In the imperatives of this category we are listening to "the voice of experience." We objected to Gestalt theory because of its insistence that its laws are *a priori*. The oughts of utility, we observed, grow out of a process of learning and change with the progress of science, invention, and discovery.

"You ought to grip the handle more loosely." That is not the voice of a beginner but of an expert—one who has found by bitter experience how to grip the handle and who sees what is now wrong with your own execution. But *bitter experience* is a misery, and it is distressing for *something to be wrong* with one's performance. The ought of expedience indicates the technique that has reduced bitterness before and can eliminate your own clumsiness now. The ought of expedience or utility is voiced when the learner listens to the learned. We might translate it into: "Experience teaches that thus and so is the thing to do, to have, or to be, in order to improve some unsatisfactory condition." Such imperatives are therefore doubly motivated by distress, the past distress of the adviser and the present ineptitude of the advisee.

But it is not quite enough to say that the imperatives of utility depend on learning, for *learning* is a double-edged word. For one thing, learning means the kind of cue reduction that

results from drill. By repeated performance, or in the course of practice, a terminal act becomes producible by a steadily diminishing set of antecedents. When I learn to play the piano I must first look at the printed music score, speak the name of the note I see, look down at the keyboard, find there a key of proper color and location which goes by the same name as the note, read the fingering instructions, count my fingers to find the proper one to use, get it in some awkward way over the key in question, *and then*, and not until then, can I "play the note." After hours of practice these preliminary explorations begin to drop out; they can one after another be dispensed with; and the time may come when, "Seated one day at the organ," the mere sight of the notes on a new music score sets my fingers playing. I now play "at sight." The intermediate steps are no longer needed. Crutches and ponies can be thrown away, for I have learned my lesson. This cue reduction resulting from drill is genuine learning. It is perhaps the only case to which the term *learning* should be applied in psychology.

But *learning* is also in common use as the name of another process, the one that is most prominently back of the oughts of expediency. Consider such statements as the following:

He looked out of the window to learn if it was raining.

A little learning is a dangerous thing.

They dug all over the place to learn if there was any gold.

Learning as here used does not mean cue reduction. To learn, in these statements, means to ascertain, to discover, to find out, and *learning* is the name used for knowledge, for facts that *have been* discovered or ascertained. Now discovery is an important act. Before anything can be learned in the first sense it must already have been learned in this second sense.

Once it is learned (discovered) that by hitting a ball with a racket you can put it over the net, you can by learning (drill) perfect that act. First the baby discovers that he can balance himself and locomote on two extremities. In time, by the process of cue reduction, he manages to do it with little or nothing to lean on.

There is, so far as I know, no formulated psychology of

discovery. All kinds of things are discoverable in all kinds of ways. If there is any science of discovery, or any art, I am not acquainted with its analysis. But the topic merits inquiry, for initial discovery, knowledge of what is to be mastered, is perhaps the most important of our activities. One kind of education, called "progressive," stresses this kind of activity as the one most to be cultivated. Another kind of education, called "old-fashioned," maps out a prescribed curriculum, lesson by lesson, and urges the pupil to master it by drill. Here we have precisely the two meanings of the word *learn*.

The principles of discovery now available are chiefly old common-sense maxims like "Keep your eyes open," "Keep busy," "Try, try again," and "Don't give up the ship." Essentially they are admonitions to the individual to try to *increase* his *scope*. Now *scope* is the name of one of our fundamental principles. But we know little at present about the modifiability of this trait. We know that certain conditions are unfavorable, such as fatigue, sleepiness, alcohol, excitement, youth, ignorance, and sensory deprivation. But there is no evidence that the individual can increase his scope beyond the limits that are native to him, and these limits appear to vary widely among individuals.

There is to be discerned also a slight arrogance, an intimation of self-esteem, in the assertion of oughts of expedience. They are a little like the confident assurance that "Mother knows best." He who would instruct others how to plant potatoes, how to grip a handle, how to teach algebra, he who criticizes an axe for its handle or Hitler for attacking Russia does it on the assumption that his own knowledge is superior, his experience wider, his strategy better than that of some one else.

This confidence and pride in the value of one's own experience is perhaps as instinctive as any of our traits. A distinguished psychologist, noted for his shrewd observations of himself and others, once remarked on the gratification he felt when anyone asked him what road to take, what way to go, to get to some place or other. And he noted an added glow of pride and satisfaction when he was able to give the requested

advice. This is reminiscent of McDougall's statement that the self-regarding sentiment is closely entangled with our imperatives. .

Too much, however, should not be made of pride in our analysis of these imperatives. They often appear to have a ring of condemnation or criticism, but this may come not from the use of *ought* but from the context, the circumstances, the intonation or accent. The oughts are equally applicable to acts or arrangements that are approved, and here they serve as a *sign* of that approval. Suppose it is noticed that a road is being paved and the assertion is made that "That road *ought* to be paved." Or, on noting that arithmetic, in some school, comes before algebra, the assertion is "Arithmetic *ought* to precede algebra." In these cases of approval, be it noted, the vocal accent is on the *ought*; in the condemnatory or critical cases it is on what *follows* the ought. Accents, indeed, are important parts of speech and here as in many other cases the psychology of the imperative needs to pay attention to such collateral features, as well as to the general circumstances under which the imperative is asserted.

There are, nevertheless, the rudiments of "conscience" back of the oughts of utility. These verdicts lie on the lowest of the four moral planes. McDougall described this level as "Strivings prompted by desire for instinctive goals, but also by goals conceived as *means* to these initial goals." There are standards of workmanship back of many assertions in this category. Habits of doing things in ways experience has shown effective become parts of the workman's self. To ask him to work with a rusty saw, a short-handled axe, to travel an unpaved road, to plant potatoes in the new moon and peas that have not been soaked is something like a personal insult.

There are right ways and wrong ways, and he senses these qualities. The feeling of wrong may be traced to the violation of his recent trade instruction, and he may be able to remember the occasions of this training. But his reaction is a more or less immediate discontent, an unanalyzed emotional distress. He disapproves the act, the tool, or the arrangement; it is not the kind of thing a person like him associates with; he repudi-

ates it. The fact of this immediate rejection of something foreign to established habits, the unpleasant sense of regret or reproach is, on the utilitarian plane, an elementary conscience. So also is the acceptance and approval of facts that do not arouse this form of irritation.

Ramifications of Expediency

In spite of the existence of a utilitarian school of ethics, idealists might urge that we should exclude from our concept of conduct the things that ought to be done or ought not to be done on purely instrumental grounds. One ought not to spade up his vegetable garden when the soil is too wet *because* the ground will then cake in hard chunks and be difficult to manage. A carpenter *ought* to lay his planes on their sides instead of face down, but only because otherwise the bits may be injured by contact with foreign objects. One should cleanse a wound promptly *because* thus infection may be avoided, and so on. There are thousands of acts thus dictated or prescribed on the grounds of their desirable or undesirable consequences. But is that any reason for ascribing to these acts a moral status?

It is true that such acts are evaluated only or chiefly in relation to the actor's momentary aims. They are appropriate or inappropriate only in the sense that they are or are not well calculated to achieve some more or less explicit outcome. The sanction, it may be said, is not so much one of value as of practicality. The discrimination involved calls mainly for the exercise of information or intelligence.

However, this may be true of nearly all our categories of obligation. Furthermore, even the disinterested bystander is likely to feel satisfied or offended by such acts or failures to act. The goal in such acts, again, may not always be explicit or personal; it may indeed be wholly adverse or unexpected. Thus it may be that sabotage is the individual's aim, in which case of course he *ought* to spade the garden too early, throw tools down on their cutting edge, encourage neglect of the wounded.

Even when such oughts are simply technical, when expedient fitness to a goal or aim is the criterion, it is often felt that while in this sense the actor ought to do thus and so, there is a wholly different sense in which he *ought not*. In general however there is a tacit assumption that the actor and people in general wish to have good gardens, efficient tools, and uninfected wounds. These goals may not at the moment be represented in the individual's reflection. He may instead be intent on getting his meals, keeping a date, seeing a horse race. That is, he may be neglectful, lacking in scope. It may even be true that from the point of view of these secondary goals neglect of tools and other incautious behavior may be expedient.

We shall do well not to exclude too hastily this concept of the expedient as constituting or involving moral conduct. Perhaps all conduct is to be considered as behavior directed toward some goal. Perhaps even the most obscure sanctions or taboos are based finally or initially on a sensed or presumed fitness for specific outcomes. Perhaps if we can discern clearly what the goal is in such cases discrimination even here will be found to call simply for the exercise of information and intelligence. An early philosophy declared, in fact, that the *wise* man would of necessity be a *good* man. But we shall probably find that a great deal of so-called good conduct is based on something other than insight. There is also the possibility that in some such cases there was historically a goal or a utility that prescribed the act, or tabooed it, even if no present utilitarian end is served by it.

Consider such behavior as the following, along with the topic of rational or expedient acts. Many workmen do things in a certain fashion because "this is the way." A certain method is *approved* technique, or trade practice, even when the workman has little or no understanding of the principles involved.

I once had some masons build me a cistern. A brick wall was placed across the middle, partitioning the cistern. On one side was the inlet from the roof, the water from which was supposed to filter through the wall and, on the other side, be clean; from this clean side ran the pipe line to the suction pump.

All of this seemed clear and reasonable, and was understood

even by the workmen. But there must also be an overflow outlet, to let surplus water escape when the cistern became full. This overflow they were going to install on the clean side. Overflow was thus always filtered water and all excess water had first to force its way through the brick wall before it could escape. To this I objected, demanding that inlet and overflow be placed on the same side of the wall, thus sparing the filter wall the useless accumulation of dirt from water to be discarded anyway, and also facilitating the free flow of water from the roof.

The men would not listen. "This is the way," they insisted. When asked "Why?" all they could say was, "This is the way we always do it. This is the way it *ought to be*." And so we contended, their folkway, their unjustifiable *ought*, pitted against my arguments. In time they relented, for after all, it was to be my cistern. But I am sure they went away convinced that I was a fool, yet unable to say just why.

But they afford us a good example of something. Now how *ought* a cistern to be built? For me it seemed a sheer matter of expediency, that called only for the use of information and intelligence. (Perhaps there are reasons unknown to me which would justify their trade practice, if I knew them.) But for them it was simply "the way," and not to do it thus was inferior trade practice, was *wrong*. They had learned to do it that way; they had always done it that way; the master masons whom they revered did it that way; but they did not know why.

Here then we have what might be called a *conscience*; perhaps a workmanship conscience. It is clear enough that an *approved way* may be clung to with little or no understanding of the principles, if any, involved. And workmen may experience a genuine sense of guilt or distress at the violation of such a "standard practice."

We began by saying that these *oughts* of rational expediency are not wholly foreign to the concept of conduct in a more ethical sense. In this example we have the same act being for one person evaluated as a rational expedient, by another person being considered only in regard to precedent, habit, standard practice—that is, in essentially an ethical or an esthetic sense. No

doubt these workmen found the spectacle of my cistern actually offensive; they may have suffered pangs of remorse for having let me persuade them to violate the code of their trade; they may have reported their sin to the priest and asked to be forgiven. I had somewhat the same experience once when I found myself half way to the college with my bedroom slippers on.

Here is another example of *ways of doing* that underlie a strong sense of compulsion or ought, that differs in some respects from the foregoing. The tailor always puts two or three buttons on the cuff of my coat. If I ask him not to do so, he looks disturbed; to leave these buttons off would give him a feeling of guilt or shame; would offend his sense of workmanship. A coat sleeve *ought* to have buttons on the cuff. When I ask him "Why?" he is baffled. "We always do it that way. That is the style" is the most I can get out of him.

Now if some use could be made of these buttons we might consider that the ought involved here was merely one of the expediencies we have been talking about, but that the tailor did not understand these reasons. But I have never found a *utility* for them; instead they are in many ways a nuisance, an expense, and a doubtful ornament. Even the esthetic excuse for their extravagant presence cannot be accepted.

In this case, however, we can point to a *historic utility* that initiated the practice. When men used swords and wore gauntlets, they had to button these gauntlets to their sleeves. *Genetically*, the practice was a practical expedient; it survives as something very different, even to the point of becoming inexpedient. The nature of these oughts that have a genetic history which no longer justifies them is very instructive.

The imperatives of expediency have therefore every reasonable claim to a place in our list. They have indeed a double justification. Not only is there the initial requiredness of an act for some particular end or goal. There is also a strong tendency for actions, first established by utility, to become supported by a feeling of urgency on their own account and to be dictated by a sense of duty. This is true even when the original occasion which made them appropriate no longer exists.

This is, to be sure, the mark of a neurosis. But the imperative character of neurotic symptoms is one of their most significant features.

The Category of Duty

Imperatives of the ethical category of Duty have often been given special attention in the belief that there is in them some quality that testifies to an inner moral sense, an extraexperiential guide, or some transcendent key to conduct. All these imperatives appear to be related to one or other of three factors, which we may call conscience, ideals, and principles.

Conscience is the name for a vague feeling tone of content or guilt that accompanies or follows the execution or the contemplation of an act. The feeling of guilt is a mixture of shame and fear, and it is felt as unpleasant. The feeling of sanction or approval is a blend of pride and confidence, and it is felt as pleasant. These feelings arise directly from the act or the thought of it, as if intrinsically bound thereto. The feelings are usually unaccountable; that is to say, their genetic history is not clear to the actor. If there be such a genetic history it goes far back into his early days of social life, or it issues from such a variety of approvals and disapprovals, rewards and punishments, humiliations and exultations that no one of these stands out as the responsible source.

The ideals, on the other hand, are capable of more articulate reference. They may take the form of concrete personalities the quality of whose acts are known or surmised, approved and accepted as standards by other individuals for their own emulation. Or they may be very abstract personalities, formulated much as are the characters of mythology and fiction. The essential thing is that with their names there be associated a specific array of acts, or at least of qualities pertaining to acts. Among the concrete ideals for example are father, a certain teacher, a playground hero, a big brother, a favorite actress, and historic characters such as Jesus, Socrates, Judas, Napoleon, Voltaire, Lincoln. Among the abstract ideals are such as the knight, the gentleman, the roughneck, the marine, the gangster,

the philosopher, the Christian, the refined person, Robin Hood, the clown, Satan, the dutiful son, the good sport, the honest man.

By *principles*, finally, we mean certain viewpoints, codes, creeds, and philosophies that are more explicitly formulated and recorded, although they may often be so brief as to constitute little more than slogans. Among them would come such things as the Ten Commandments, the Golden Rule, the Apostles' Creed, the survival of the fittest, Nordic supremacy, hedonism, the greatest good of the greatest number, opportunism, the organismic conception of society, the Four Freedoms, the life of sacrifice, and the rules of action prescribed by any social or religious organization.

In order to see the grounding of ethical oughts of conscience, of ideals, and of principles in our general systematic way, we need to sketch briefly the genesis of the concepts of right and wrong in the development of the individual.

Development of Conscience

The earliest appearance of this distinction, in the career of the individual, seems to be tied up with natural reward and punishment. Things tipped over are broken; objects dropped into the river are lost; kittens too roughly handled run away; frightened birds disappear; lax coordination involves falls and bruises. Acts thus acquire positive and negative values; certain things can be done without suffering; others are to be avoided. The correlated feelings of congeniality and distrust, of confidence and fear are the beginnings of conscience. They are much like the more mature verdicts of right and wrong in the category of expedience.

But life is short; playmates and adults are not infinitely tolerant; and the penalties of ignorance fall not on the actor alone but may bring pain and unhappiness to others. It is tedious to wait for the sluggish establishment of "good sense" through natural punishment. Others, therefore, take a hand, and early in life artificial checks and remonstrances, social control, and ridicule begin to be applied. Baby is petted for certain

acts and scolded or punished for others not by natural consequences alone but by determined parents and obstinate companions.

By the elders and others of the social group an arbitrary system of taboos and tolerances or praises becomes established. Certain acts, it is soon learned, may be executed with approval or reward, that is, without distress. Other acts are under no circumstances tolerated, or are followed by pain or deprivation. There is also an array of neutral acts that seem to have no significant social status. At this stage the feeling tone of each act is independently acquired; there is little transfer or generalization and no clear classification. The fact that the individual forms these specific habits of doing or not doing this or that, or of feeling in these specific ways about them, is precisely what McDougall dignified by the term *sentiment*.

In the course of development and experience, and especially with the development of speech, the approved acts are grouped together under such categories as "good," "nice," "fine." Tabooed acts are similarly classified under the captions "bad," "naughty," "nasty." There is no special mystery involved in this act of classification. It is simply the application of the same name to a diversity of acts, just as baby calls all whiskered men "papa" and all quadrupeds "bow-wow." A baby who was born and had lived in city apartment houses but had seen large boats on the river was taken to the country for the first time and saw separate houses scattered over the landscape. His immediate reaction was "Boats! Boats!"

The basis of these early classifications is purely perceptual: "Mama does not like"; "Papa will spank"; "The bad man will get you." The two large groups are later known as "right" and "wrong." The indifferent acts, which really bulk large, are given no special name, for no special feeling tone attaches to them. This dichotomizing of conduct, with no adequate designation of the intermediate region of what is really a continuum, facilitates the development of all-or-none feelings and promotes the growth of conscience. Acts thus become immediate stimuli to positive, or more especially to negative reactions, and the occasion of that effective combination of fear, shame, re-

morse, and guilt that we call "bad conscience." This it is that "does make cowards of us all."

On this developmental plane there is still no clear understanding of what *constitutes* the good or the evil, except the recognition of specific acts as sanctioned or tabooed. The concepts of right and wrong (that is, these names) appear before the nature of transgression or that of virtue is understood; they are based on natural consequences and personal authority. The acceptance of such authority makes of it a model, a criterion of reference, a social standard. It is not a far cry from "What mother would like" to "What would Jesus do?" "What would a gentleman do?" "Is this the way a rough-neck would act?"

For as experience continues other personal authorities besides parents and playmates enter—teacher, policeman, preacher, writer, philosopher. Such concrete or abstract hero patterns may indeed remain the measures of conduct into adult life. To act in the pattern of or in defiance of the hero becomes enough to arouse the contented or apprehensive feelings known as conscience. As "public opinion" or "public sentiment" takes the place of personal heroes or models, the moral (from *mores*, meaning "customs") or ethical (from *ethos*, meaning "usage") character of the distinctions becomes more obvious. When codes or creeds are adopted, as voicing the values of "my people," there may still be no clear understanding of the nature of the right or the wrong, nor of the difference between these and the great intermediate group of acts to which the terms do not apply. But the ethical character is pronounced, because "the people," and especially "my people," have had a hand in formulating, perpetuating, and inculcating these codes. As Sumner said, "The mores can make anything right."

Perhaps it is when right acts or wrong acts conflict with those of like category that need seems to arise for some statement of the nature of the difference between right and wrong, some definition of the nature of good and evil. Thus it is wrong to be a "tattler"; but it is also wrong to conceal another's crime. What action, in such a dilemma, will give the individual peace? Which is *more wrong*? The concept of degree of wrong, and the conflict of wrongs, and of rights, thus invite consideration

of the nature of the distinction. This might be undertaken by the empirical survey and comparison of all the numerous acts that have come to constitute the two great classes during the career of the individual. But even if this tedious process should be undertaken, there would be sure to be disagreements with the conclusions reached by others on the basis of their own biographies, and no sure ground of distinction would be achieved.

It is at this point that definitions, viewpoints, philosophies may be invoked and the quality of acts assessed in their own right, regardless of personal sanctions. Points of view, ethical systems, and the like have more or less to be individually *adopted*, although the acceptance or rejection of a viewpoint is in many ways a function of the total experience of the individual up to that time. Few individuals formulate a philosophy of their own; they are more likely to *ally* themselves with some viewpoint already in process of formulation by others. But the adoption of a viewpoint, a philosophy of life, involves the whole individual, and here the sentiment of self-regard, so vividly described by McDougall, has right of way. But it was also involved in simpler fashion in the obedience to mother, the choice of a hero, the acceptance of a creed or code.

The chief thing that distinguishes these levels, all the way from the infant's startled look of apprehension when it executes again an act that has previously been punished, to the teacher who accepts dismissal rather than condone a violation of the principle of freedom of speech, is what we have called *scope*, the variety and multiplicity of the factors taken into account in the development of the positive or negative reaction. The acceptance or rejection of acts as congenial or foreign to the habits and values one holds most precious is what has been meant by the activation of the sentiment of self-regard. We need only recognize that such a sentiment is a description of what takes place, not an entity in the beyond. Even if the sentiment were "an enduring disposition in the realm of mental structure" it could not operate until activated. Even the hormic psychologist insists that dispositions have to be "unlocked" by certain "keys." It is these keys that are really the motives,

and the keys are the distresses of individual life. They accumulate in one's biography and they are reintegrated by new acts in the form of those personal attractions and revulsions that we know as ethical and moral imperatives because of their social origins and their importance in contributing to the individual's social status.

A distinction may be made between the prospective and the retrospective conscience. It is really the prospective conscience that makes cowards; it accompanies the contemplation of an act and assents to or interferes with its execution. The retrospective conscience is self-applause, or, on the other hand, remorse. It follows upon an act already committed and perhaps done in spite of a prospective repugnance. It is likely to be more vivid than the prospective conscience, and tinged with pride and elation or with regret and self-condemnation. It leads not to cowardice but to depression and a consciousness of guilt, or to a blithe gaiety and assurance.

Quite aside from their temporal relations to the act, there are more systematic reasons for their different degrees of acuteness. The prospective conscience is a reaction to the mere symbol or thought of an act, that is, to a reduced cue. The retrospective conscience follows overt and complete activity or accompanies a memory recently refreshed by such activity. It is a general rule that responses to partial cues or symbols are less prompt, less complete, and less vigorous than those to complete context.

The prospective conscience, furthermore, is open to modification by the execution or inhibition of the act. For the retrospective conscience there is no such immediate technique of relief. At most some act of restitution, penance, or propitiation may be hoped to dull its pangs. But some of these retrospective pangs of conscience seem wholly unremediable; they may last for a lifetime and for half a century disturb the individual's peace of mind.

The difference in intensity or force of the prospective and the retrospective conscience is a matter of some practical importance as well as theoretical interest. Of course if deeds are not followed by remorse, or at least by regret, no problem of

conscience is involved. But in other cases the interesting difference is usually present between the antecedent and the subsequent feelings.

In the case of "good deeds," is it not the rule that the complacency and pride that follow are more lively than the confidence and self-assurance that precede them? We strut and preen our feathers after the good deed, not before it. Certainly in the case of "misdeeds" that are followed by remorse the self-blame that follows the act is more intense than the repugnance felt before its execution. In the latter case there are of course two conditions. First there are the acts of impulse or passion, committed so precipitately that they are not really *considered* in advance; but there is plenty of time for subsequent reflection. In such cases it is inevitable that the subsequent feelings should be livelier than the prior lack of feeling.

In the second place there are the deeds of deliberation or intent. It is here that the theoretical question arises. In such cases the prospective conscience is weak, too weak at least to deter the individual from the act. But remorse after the act may be severe. Lady Macbeth's criminal action was deliberately planned and her prospective scruples were no barrier to it; but after the event remorse took possession of her and drove her to distraction.

Prospective conscience attends the imagination, the picturing of an act in advance; retrospective conscience attends the picturing of it in memory. Since in both cases the stimulus is an idea, a picture, why does the intensity of feeling differ? Of course several factors contribute to this result. Increased scope is perhaps one, for after the act one has been made more fully aware of its nature and quality. But part of the answer appears to be found in one of our familiar principles, namely that response to a reduced cue varies in completeness according to the completeness of the cue. In both cases it is true that the stimulus is a symbol, a fancy, an "idea" of the act. But in advance deliberation the symbol is very much reduced and sketchy, lacking in sensory vividness and relatively bare of motor accompaniments. Whereas in retrospect the idea, the memory, is more like a positive after-image. As a symbol or

picture it has recently been reinforced by actual perception; it is *more like* the original experience or model than was the image of imagination. That is at least part of the reason why retrospective repugnance is more intense than that of anticipation. If this were not true, and here is the practical application, more crimes of deliberation and intention would be nipped in the bud than is actually the case.

A very simple method of explaining the difference here considered might take the form of showing that all conscience is retrospective. Our so-called prospective conscience is really tied up with our past experience of such acts; it is due to memory also. But it is farther removed in time from its initial occasion and therefore is weaker than that retrospective conscience that immediately follows its act.

The imperatives based on ethical and religious scruples are more like those of esthetics and those of the Gestalt type than they are like the oughts of social welfare and those of practical expedience. They appear to arise more directly out of one's own nature, to be tied to immediate tastes, to reflect deep-seated personal preferences and aversions. There may often be reasonable justifications of them available in social welfare, in practical expedience, or perhaps in personal hygiene and safety. But they do not consciously arise out of these considerations at the time they are voiced. The coercion is not extrinsic; it is intrinsic to the act and to the individual. Such things are not the kind of thing that he, when he is well pleased with himself, does. They may indeed lead directly against the interests of the individual and his group; they may invite danger; contradict judgments of practical opportunity and self-advantage; run counter to the commands of authority and the expectations of associates. It is a higher imperative than these, partly because of its buried origin and the strong hold that early influences have on the individual; and partly because it comes in time to be a summation of the individual's whole biography. It is this quality that leads us to put the oughts of conscience or Duty in a separate category.

Reference to the evolutionary levels of conduct sketched by McDougall will show that all those levels are included in the

account we have given. First the appreciation of acts as contributory tools (natural reward and punishment); second, characterization of acts according to their probable rewards and punishments (individual control, sanction, and taboo); third, estimated approval or disapproval of others (models, ideals, principles); and finally evaluations in terms of criteria immediately part of the self-regarding disposition (viewpoint, philosophy of life, self-approval).

It may be observed, finally, that except for the most primitive of these levels, the level of animal conscience, there is always involved the sort of thing we have called a "plan." The hero, the code, the ideal, the principle, and the philosophy of life—all these are blueprints for behavior. The motivating distress of indecision, the *question* of this or that behavior, first arouses associatively the generalized plan. Motive and plan then jointly determine the subsequent flow of events. Ethical oughts therefore are definitely purposive and exhibit little or none of the quality of the autistic. The plan is an established part of the configuration that we call the self. Violation of it gives rise to a secondary irritant which is as much a part of conscience as is the faint alarm associated with punished acts on the simpler levels of conduct. Imperatives of Duty therefore evolve on the basis of native insight and discovery, plus the cue reduction that comes from experience; they point to techniques of relieving a distress that comes chiefly from the impress of the social environment; their complexity and validity are a function of the scope of the individual for the circumstances under which he acts and his openness to a variety of influences in the course of his biography.

Delinquency

If the account here given is correct we may be in position to add a useful word to the discussion of delinquency. Controversy was aroused by the assertion of certain psychologists that intellectual defect is heavily responsible for the social delinquent. Measurement of institutionalized delinquents by intelligence tests has yielded equivocal results. When the ratings

have been low, as predicted, it has been counterasserted that these delinquents were not representative. They were the malefactors that had been caught, convicted, and incarcerated, the stupid delinquents, and of course the tests would reveal their stupidity. Some investigations of convicted criminals, on the other hand, have found them not to be different from the rest of the population in intelligence.

The fact is that available tests are chiefly constructed on the assumption that intelligence is ability to learn. But learning, as we have insisted, is only one aspect of intelligence. An equally important component is that characteristic we have called degree of scope. It is deficient learning ability that marks the feeble mind; but it is inadequate scope that characterizes the neurotic. The early psychological students of delinquents sought to identify these malefactors with the feeble-minded, and the tests did not wholly support this conclusion. It is nevertheless true that delinquency rests on intellectual defect; but the defect is similar to that of the neurotic rather than to that of the imbecile.

Delinquency, in other words, is a form of neurosis. The delinquent is one who acts impulsively, without due consideration of all the factors. He is carried away by the attractiveness of one cue, without due regard to the context in which it now appears. He lacks control, restraint, inhibition, and if the police force is active he gets himself involved in distresses even more severe than those he was trying to escape. This, as we have seen, is lack of scope. There is reason to believe that if tests of scope were as available as tests of learning ability are, the measurement of delinquents would reveal this intellectual deficiency. For it is an intellectual weakness, even though it shows itself socially as impulsiveness, incorrigibility, recidivism, and irresponsibility. Indeed, some preliminary surveys using tests designed (somewhat poorly to be sure) to emphasize the demand for scope as well as for cue reduction tend to confirm this expectation.

We may add one further contribution to the understanding of the delinquent. Since every motive is a distress, the delinquent act is, like all conduct, an endeavor to relieve the distress which instigates it. The delinquent will be understood only

when along with the recognition of his lack of scope there is also discovery of the nature of his motive, the nature of that distress which prompts him to his misconduct.

Some writers on delinquency fall back on the vague assertion that delinquency originates in emotion, perhaps in emotional conflict, or in suppressed emotion. Aside from the usual vagueness of these assertions and the somewhat maudlin way in which the word *emotion* is used, this doctrine puts the cart before the horse. Emotion, at least affect of a sort, is indeed likely to be associated with delinquent acts. But, as is the case also with the most praiseworthy conduct, the emotion *follows* rather than precedes the act. The feelings involved are whatever relief of the initial distress (motive) the act accomplishes. The understanding of delinquency, as well as of saintliness and of just ordinary human conduct, awaits a thoroughgoing application of our three fundamental principles.

Physical, Mental, and Social Hygiene

We can escape some of the distress of long and detailed analysis by noting that this category offers nothing new. The oughts of hygiene were put together on the basis of their subject matter. All of them relate to personal safety or danger, or to the success or failure of individual projects and ambitions entailing some kind of health. Since each is related to a specific project or enterprise, these oughts are like those of expedience and utility. They point to items calculated to prevent the mis-carriage of effort and endeavor—to ways of escaping the distresses of pain, illness, frustration, shame, disgrace.

In a similar way these imperatives resemble those of social welfare. They differ from these only in the more limited or explicit character of the ills to which they refer, and in their more personal bearing. Like the imperatives of social welfare they involve some reference to a plan and are distinctly purposive. Like the imperatives of expedience they are contingent on experience and discovery, often appear in the guise of scientific recommendations, and suggest some slight arrogance or intimation of expertness on the part of the speaker.

Like both these other categories the oughts of hygiene (physical, mental, personal, or social) are essentially instrumental in character. They relate, in McDougall's terms, to the appreciation of certain goals as *means to* the attainment of more primary strivings, or at most, to the characterization of acts according to their probable rewards and punishments (natural as well as social). Developmentally considered therefore they lie on the first or at best on the first and second levels of complexity. Instigated by a concern over distress, facilitated by experience and cue reduction, and promoted by scope or insight, these imperatives present no unique problems and offer no exceptions to our general principles. A more rigorously logical classification might have avoided the category entirely by distributing the statements we have placed there in one or more of the remaining groups.

Conventional Propriety

The source of the imperatives of etiquette, convention, and custom is easy to discern. In every society certain customary ways of acting in this or that situation develop. They have the approval of popular usage, and the sanction of the elite. Within the larger society these ways or mores may differ also among minor groups, but each person associates himself with one or another group—the group of “my people.”

The mores may be meaningless; they may be chiefly esthetic; they may reflect certain hierarchies of dignity and status; they may persist as simple devices for regulating social intercourse, promoting order, and stabilizing expectation. They may have obscure basis in the safeguarding of the young or the weak, or may even be commercially fostered by designing manufacturers and tradesmen. Within certain narrow limits they may more or less deliberately vary from time to time, providing the phenomena of style and fashion. From epoch to epoch they may gradually or sometimes abruptly change. Often they had an initial basis in some utility or expedience and now survive as vestigial relics, often perhaps turned to more or less trivial new uses, quite different from those they once served.

There is nothing essentially vicious, for example, about being lightly clad; what is *proper* is to have the degree of exposure accord with the customary time and place. At the seashore one may still be a gentleman with only a loincloth; on the tennis courts additional appendages are *comme il faut*; in a fashionable restaurant he must be dressed almost to the melting point or else lose caste or be refused admission. There are times when even a lady may wear little or nothing; occasions when in addition to this minimum most of the ventral side must be covered; and finally there are moments and places when even the dorsal expanse dare not be exposed.

What these combinations of time, place, and apparel are cannot always be logically deduced. What the mores are, here and now, only experience can reveal, and even experience may be mistrusted unless it is almost contemporary. For these sartorial conventions have not the remotest connection with the logical role of garments or even with whatever may have been the original justification for the invention of clothing.

Back of the phenomena of convention, custom, style, and the mores are many considerations which interest the sociologist and the anthropologist. But the individual psychology of oughts in this category is simple enough and it is scarcely at all related to the genesis of these institutions. The average person finds nonconformity to these patterns uncomfortable or embarrassing, and strives to alleviate this distress by observing the letter of the folkways, even if he repudiates their spirit. There was nothing intrinsically wrong about the bedroom slippers I once found myself wearing on the way to college. They were in many ways well adapted to the occasion, and I recall seeing the strong man of a circus walking on Main Street in my home town in just such footwear. Nevertheless I hastily returned home and exchanged these comfortable moccasins for a pair of clumsy shoes such as the other men would be wearing.

To appear in these slippers would render me conspicuous in an unimportant but nevertheless undesirable aspect. It would expose me to the taunts, however playful, of my colleagues. It would destroy the serious rapport of my classroom. In fact, it would bury me in shame and confusion. It might, if

overindulged, even mark me as eccentric and radical, arouse the suspicions of the administration or the trustees, and jeopardize my pleasant connection with the institution. The outcome, as reflected in my actual conduct, was the assertion of a conventional imperative: "A college professor ought not to wear bedroom slippers on the campus."

All that the ought does is to indicate at least one technique for preventing embarrassment, shame, and chagrin. All these distresses are sufficiently painful to make the assertion more than a mere statement about what college professors are now wearing. They convert the statement into the assertion of a vigorous imperative.

The ethical imperatives have sometimes been said to put one "in tune with the Infinite." The imperatives of propriety and convention keep one in tune with the Finite. Not everyone experiences these imperatives in the same degree. There is an age in youth when most of us are especially sensitive to them, and a later period when we become relatively immune to them. They are less urgent in those who have already achieved their goals than in those who still need the good will of the public. There are some rank individualists who revel in nonconformity and seem to achieve complacency, perhaps specious, only by violating the conventions. Nevertheless, when a conventional imperative is affirmed, it is not on the basis of an instinct; not due to self-regarding sentiment neatly packed away in the soul. It is, as we have found to be the case with all other oughts, the indication of a technique designed to deliver some individual from one or another form of misery.

Interestingly enough, as in the case of the esthetic imperatives, and contrasted with those of utility, social welfare, hygiene, and logic, the oughts of convention have some of the marks of a neurosis. Often enough they are merely due to the inertia of habit, persisting after some original justification has vanished. Under any circumstances they are promoted by a restriction of scope. If you begin to take things as a whole into consideration and especially if you insist on emphasizing the present circumstances, the imperative is clouded. For the imperatives of propriety arose out of past episodes and it is

often enough only some trivial cue in the present context that provokes them. They may be actually irrelevant to a present situation but since their observation is the mark of the cultivated, the sophisticated, and the gentle, not to observe them is to provoke rather than to alleviate ignominy.

Justice and Equity

The category of Justice presents a number of interesting questions. Newspapers appeared quoting from President Truman's introductory speech to the International Conference on Security meeting at San Francisco. The quotation was his assertion that "Justice is power. Justice is the greatest power in the universe." One paper went so far as to put the word "power" in quotation marks, as if suggesting that there was some element of untruth in the assertion. It is possible that the editor did not mean merely that the president had perpetrated a pun on the word, using it as he would for a nation. Perhaps he had a real glimmer of the nature of the error underlying such an assertion.

For of course justice is no power; it is a mere negative state, a quiet and passive condition in which there is nothing to complain of and nothing to be done. Justice is a name for the absence of injustice. It is *injustice* that is a power, a positive distress and a mighty irritant that we refuse to suffer. Injustice corresponds to the clouds in the sky, the real sources of lightning, thunder, and rain; justice is a name for the clear spaces in the sky, the neutral background where there are no clouds.

But the problem is still very real: how can we perceive injustice? It is not a visual experience, an auditory attribute, and, if we refer to it in terms of taste or odor, we realize that we are speaking in figures. Our first problem then is that of understanding how the perception of injustice is possible and how it comes to be distressing.

Such terms as evenness, fairness, balance, equality come to mind when one thinks of justice and equity. These concepts have become so loaded with the complexities of civilization and

the institution of law that to portray their present content in detail would be impossible. But it is not difficult to discern their nature in simpler activity, and it is likely that the more abstruse concepts have arisen on the basis there operative.

We are, be it remembered, bilaterally symmetrical creatures. This fact we have already cited as perhaps responsible for the dichotomizing character of our language, which grew out of gesture. Nowhere is the dichotomizing pattern more dominant than in legal matters and in the procedure of the courts of justice. There the Law of Excluded Middle holds rigorously, and a man is either honest or a thief, guilty or innocent, insane or in his right mind.

There every little boy or girl
That comes into this world alive
Is either a horrible criminal
Or else an honorable citizen.

Now our bilateral symmetry imposes various other constraints and predispositions upon us. The comfort of balance or the dread of instability is one of these. Carrying a heavy load on one shoulder throws the body into a posture that is unpleasant. One must strain muscles and distort the frame in the endeavor to maintain balance, for lateral balance is needed for secure locomotion. We prefer to carry a suitcase in each hand rather than both in one and nothing in the other. That gives more equitable distribution of load, as well as of muscular activity, and the basis of equity is balance.

Balance is primarily a motor experience, but in subtly derived ways we also prefer balance in the fields of sensation and perception. If our shoes are laced, they must be equally tight or we are miserable; not in actual pain, of course, but really irritated. We dislike unbalanced designs and arrangements. The balance, to be sure, need not be mechanical balance of mass against mass, although this is satisfying. Occult balance will serve, but there must at least be equity and even distribution, laterally, of points of interest. A small, intense, or colored object will balance a larger and duller area. A small animal in motion will balance a building or even a mountain, in such a

composition. But balance of attention there must be or else the design is uneven, inequitable, disturbing, and we do not like it.

We also prefer approximate balance in the play of forces. A good game is one between teams evenly matched; this is an even, fair, equitable, or just arrangement. We detest an encounter between a big bully and a tiny chap, for the burden is unequally distributed. When two horses are pulling or two men lifting, we prefer equality of effort, for this, after the analogy of our own bilateral activity, makes for better progression. Stability depends on balance, and without stability we are in constant danger and involved in strenuous effort.

If opponents are well matched, that will mean that they deliver blow for blow. And so, even outside the realm of fisticuffs, "An eye for an eye and a tooth for a tooth" comes also to describe a fair, balanced, or just procedure. But this simple picture of equity comes to be enormously complicated and numerous considerations enter, just as in design the subtleties of occult balance displace the primitive balance of masses and areas.

Provocations come to be adduced, degrees of responsibility measured, past behavior is taken into account, heredity and health are weighed in the balance. The details of equity may easily exceed precise apprehension and only a net resultant impression, what the gestaltist calls a physiognomic property, may accrue—a vague and not easily justifiable feeling of equality "on the whole." But by and large we always mean by justice bilateral symmetry or at least, symmetry, that is, balance. That is undoubtedly why Justice is traditionally pictured as holding the scales. But if we were three-sided creatures of course there would be three sides to every question and scales would be meaningless.

Advocates of the theory of empathy might declare that we act out in a tentative motor fashion the distribution of burden, claim, right, responsibility, and feel the ensuing pattern as a balanced or unbalanced kinesthesia, a motor attitude. Motor-minded persons indeed often find themselves acting out such situations in postures, gestures, eye movements, tensions. The

sense of justice may after all be, at bottom, our awareness of our own muscular spasms, strains, tensions, postures, and attitudes. That is to say, this may be the way we come to know and represent the relations of things in the objective situation.

There would be in such event nothing derogatory to the dignity of justice. The "Moonlight Sonata," in final analysis, depends on and utilizes periodic vibrations of the eardrum; "Paradise Lost" is analyzable into patterns and sequences of marks on a sheet of paper. If it should be the case that our sense of fairness is based on kinesthesia, that merely invests these sensory experiences with a wealth of meaning as symbols for larger contexts.

And the relations of equality, balance, symmetry between these symbols come in turn to symbolize the more impressive relations between or among these more imposing contexts. That is in fact the mystery of thought: that thoughts are only things, but things as they function, not in their own right, but as surrogates for graver issues.

The appreciation of these graver issues would need also to be known through the technique of sympathy, as we elaborated that technique in the case of the oughts of social welfare. For the relations of justice and equity hold first of all between persons. The items represented by the individual thinker's alphabet of muscular stresses would be primarily the distresses of the various parties concerned, along with their rights, claims, privileges, duties, qualifications, status, and other complex perquisites of social beings. It is difficult to see how the concepts of justice and equity could have any meaning outside of social relations.

We do of course extend the concepts and talk about poetic justice as we do about infinite mercy. But we indulge in a great many such unwarranted extensions, do so in fact whenever we apply to the cosmos terms whose meanings have reference to and have grown up from relations *within* that cosmos. We do this, for example, when we inquire about the duration or the extent of the universe. For such concepts are the names of relations *within* the universe, inside, in fact, our own experience. To extend them more widely is as meaningless as to

inquire about the location, the cost, the weight, or the cause of the universe.

If this account is sound, the oughts of justice and equity are amenable enough to our principles of mental activity. Violations of equity are directly symbolized by disturbances of motor balance, and these disturbances are personal irritants. The imperative assertions in this category declare a rearrangement of things which would, in the individual, yield a better balance of strains and tensions. These as symbols constitute the alphabet by means of which he represents or thinks of the most delicate relations of people, institutions, society, just as through them he knows the symmetry of arrangements in a display window, the unequal stretching of his shoestrings, and the unbalanced distribution of the burden he is carrying on his shoulders. There is then a sense of justice, and its end organs are in our sinews.

We have tried not to be unfair to the imperatives of justice, but who are we to undertake an elaborate analysis of their ramifications? The speaker who asserts such an imperative is by no means intent on his motor attitudes and tensions. The distress that his proposition shows a way to relieve is not expressly the misery of his own organism. The remedy indicated is declared as a way of relieving inequality, unfairness, inequity, and of promoting order, balance, stability, and harmony in the world at large, or in some limited section, which might indeed be so narrow as to relate exclusively to his own affairs.

But he must in some way appreciate and evaluate the objective disturbances, must represent them or think of them, and our suggestion is that he does this through the medium of his own muscular tensions. The rearrangement that he prescribes is one which, when he regards it, involves in him a minimum of kinesthetic asymmetry. If you asked him to describe his thoughts and in particular to localize his sense of justice, he would be at a loss. He could at best only refer, in other terms, by pointing, speech, gesture, to the things he was thinking *about*—a man evading his taxes, a traitor betraying his country, a dog being liquidated on the basis of a single bite. But something like this is true of all thought, for thoughts are

made of simple stuff. It is the contexts they represent or function for that are abstruse, intangible, and complex.

One might suppose that the imperatives of justice are, like those of social welfare, based on *sympathy* with the unjustly treated. But actually such an account would presuppose the quality and perception of justice. Otherwise we should find no provocation to sympathy. Once this quality has developed, however, it may very well be that the contemplation of scenes and situations may through cue reduction and the technique of sympathy arouse directly, though in somewhat weakened form, those feelings which we ourselves have in situations that we call unjust.

It may be instructive to contrast this account with at least one other interpretation of the imperatives of justice. The analysis given by John Stuart Mill in the last chapter of his *Utilitarianism* may serve the purpose, although it is on a somewhat more logical plane. Summarizing a more detailed examination of the concept of Justice, Mill writes (p. 100) :

To recapitulate: the idea of justice supposes two things; a rule of conduct and a sentiment which sanctions the rule. The first must be supposed common to all mankind and intended for their good. The other (the sentiment) is a desire that punishment may be suffered by those who infringe the rule. There is involved in addition the conception of some definite person who suffers by the infringement; whose rights (to use the expression appropriated to the case) are violated by it. And the sentiment of justice appears to me to be the animal desire to repel or retaliate a hurt or damage to oneself, or to those with whom one sympathizes, widened so as to include all persons, by the human capacity of enlarged sympathy, and the human conception of intelligent self-interest. From the latter elements the feeling derives its morality; from the former its peculiar impressiveness and energy of self-assertion.

The disturbed balance as here sketched is between rights and their infringement, between violation and punishment, between the individual and the malefactor, and the concern is that in each case the scales shall be balanced. There is also the recognition that the distress is initially a personal fear, enlarged by sympathy to include all persons. This idea of "enlarged sympathy," along with that of "intelligent self-interest" that is peculiarly

human, also introduces the factor that we have called scope. Mill's analysis could be fitted into our own with little or no modification. He is of course also concerned in showing that ultimately the basis of justice is in a certain kind of expediency, which promotes the greatest happiness of all concerned.

Consonant also with our account are the implications of laws, statutes, and ordinances. The law makes no provision for the rewarding of good acts; it offers no special benefits to the man who pays his income tax on time or in advance. What the law prescribes is that he who does *not* do so and so shall be submitted to such and such misery. Punishment, or the threat of it, is thus presumed to motivate the individual. There is of course more than one reason for this.

For one thing, imprisonment is a misery to anyone, and fines can be made so by proportioning them to the malefactor's resources; but there are few rewards that would have anything like an equal value to all concerned. Moreover, depriving the individual of his freedom of movement is cheap, and fines are positively profitable to the community, which facts recommend these procedures. Further, any act presumably results in some immediate satisfaction, so that the doer of the good deed and the malefactor have both already been rewarded. What the sentence of the court does is in part to cancel the natural benefit achieved by the illegal act.

That these considerations are part of the picture need not be questioned. But I suspect that in addition the attitude of the law, and its punitive tactics, reflect the experience of mankind up to date that it is goads, not goals, that motivate men, and that when a private misery goads a man to commit a deplorable act the best way to control him and to warn others is to provide a stronger distress that can be relieved only by socially approved behavior.

We may close this discussion of justice and equity by commenting on the degree of completeness with which these imperatives involve all three of our chief principles, as well as certain collateral processes to which we have already called attention. Cue reduction is the process whereby the intraorganic processes of the observer or speaker come to symbolize the more objective

relations to which the imperative refers; it is also the technique underlying the arousal of sympathy which enables the individual to appraise and evaluate the details of these objective relations.

The motivation of these imperatives is doubly one of distress, as in the case of those of social welfare. There is the objective disturbance of equity, that is the distresses of others primarily, and also the upset balance in the individual's own motor and emotional system, both of these calling for relief through the technique indicated by the ought. And the imperatives of this category are notably purposive, or planful; the ought often indicates a quite elaborate map or blueprint for the reorganization of things, which intervenes between the motive and the execution of the act.

Finally, nowhere is the factor of scope more important than in these verdicts of justice and equity. The very terms imply, not impulsive assertion, but comprehensive and reflective scrutiny and consideration of many factors in the situation—the whole network of claims, rights, privileges, duties, and remunerations that constitute the social framework within which these imperatives are delivered.

Categories and the Natural Continuum

The essence of value, as Thorndike has pointed out, appears to be *preference*. If the existence or occurrence of A is preferred to its absence, that gives it value, in fact constitutes its value. If A is preferred to B, value thus accrues to both items, a higher value to A than to B. The urgency of a preference is the basis of the strength or intensity of evaluation. That which is merely tolerated, but to the presence or occurrence or continuation of which we are indifferent, has no value. Things which we prefer or which are repugnant to us have positive or negative value, respectively; that is they are desirable or undesirable.

Certain values, sometimes called the higher values, are those which are above the level of the individual; they are characterized by some degree of imperative or ought. Such values transcend the bounds of individual preference and at-

tain a social, absolute, or generalized value. The implication of such social values is that not only does the individual prefer the item, but others also expect him to prefer it, if only because they do; and he expects others to prefer it, even if only because he does. Similar evaluation by others thus becomes a superimposed value, a value of "higher order." The difference is that between "I prefer" and "we prefer"; or the difference between "I like this" and "this is right."

Such differences in generality may characterize values in any field. "I am fond of apricots" does not commit others to my addiction; but "The frame of that picture is too narrow" has a strong implication that others would agree—in other words, that the frame is *really* too narrow. Both of these are values of taste, esthetic values or imperatives, but similar differences are to be found in such judgments as those of utility, hygiene, welfare, justice, and other categories.

We touch here briefly on an important topic: the distinction between the real or objective and the personal or subjective. This is again the time-honored distinction between the universal and the particular, the absolute and the individual, the eternal and the transient, the infinite and the finite, the abstract and the concrete, the physical and the mental. Such dichotomies have been treated in the disputes of philosophers as if they were not only verbal but natural, that is descriptive of nature. It has been assumed that they are the names of different realms of being, more or less diverse, incompatible and disconnected regions. Nature is thus assumed to be as discrete as are the explosive units of speech, the disjunctive terms, the words, that we use in our verbal descriptions.

According to a hoary and misguided *principle of identity* or *law of excluded middle*, things are supposed to be either true or false, real or fictitious, objective or subjective, valuable or worthless. Men, similarly, are alleged to be either tall or short, guilty or innocent, gentle or rough, honest or thieves, truthful or liars, capitalists or laborers. Actually the realm of being, that is, nature, is a continuum, a psychophysical continuum, an objective-subjective continuum, a this-that continuum. The dimensions or attributes that we call stature,

health, responsibility, veracity are continua. The extremes that we designate by our right- and left-hand gestures, by our paired words for logical opposites, are only the artifacts of haste and convenience. When these dichotomies are embodied in our institutions, our affiliations, and our social economy, the outcomes are insoluble riddles, antinomies, class struggles, strikes, revolutions, wars, and persecutions.

Formal logicians will object to this criticism of the principle of identity, the law of excluded middle. They will insist that our examples are only opposites or contraries, like guilty and innocent, not contradictories like guilty and not-guilty. They will draw circles representing classes of objects, one of these being Class A. Then they will say that the principle of identity asserts that whatever is *in* the circle is not *out* of it, and vice versa. In so insisting they overlook several things. For one thing, even in drawing circles there is room for many things to stand neither within nor without, but on the boundary. Furthermore, the essential point is that natural objects often have so equivocal a character that it is difficult or impossible to determine in which of various classes to place them.

All that the principle of identity really amounts to is an exhortation to use terms consistently, not to call a spade a spade on one occasion and then turn about and call it a not-spade. Define your terms, it says, so that you can stick by the definitions, even if you do not find any objects in nature corresponding to them. Any other interpretation of the principle of excluded middle reduces it to tautological nonsense, as in the assertion that "Whatever is not something is not something." However entertaining such propositions may be as exercises in logic, they do not instructively represent either the nature of thoughts nor that of things.

We are not here concerned with all the important consequences of the failure to recognize the characteristics of the continuum of nature and of experience, of evaluation and of behavior. It is necessary however to indicate its bearing on the topics of our present interest. For the imperatives of any category are not all-or-none; they range in coerciveness and in universality from low to high, and by continuous gradations.

Our list of categories, whatever form it may be given, is sure to be more or less artificial and arbitrary, a mechanical framework imposed upon the living continuum of nature. We may expect such categories to overlap; we shall find that many imperatives belong to more than one category; between the categories there will be numerous areas of ambiguity. That is the way nature is. Nevertheless in order to talk we must use either gestures, pictures, diagrams, or words—that is, language in some form. What is important is to realize always that verbal description may impose on nature artificial lines and barriers, separations and groupings. In the same way the maps of counties and states draw artificial lines across the objects comprising the landscape. But maps are nevertheless useful, so long as we bear in mind simply that mountains are not really severed nor streams interrupted by the boundaries we draw.

CHAPTER 7

RUDIMENTS OF MORAL DOCTRINE

I will here only briefly state what I mean by true good, and also what is the nature of the highest good.—SPINOZA.

What Is Good Conduct?

What sort of moral theory and what rules of practice might be expected to follow from such an account of conduct as that we have given? Certainly nothing so simple and artificial as guidance by an innate moral sense, control by a venerated authority, pursuit of fantasy, calculus of hypothetical pleasures, dictation by biological fitness, or mere appeal to the internal consistency of a logical self. Conduct, as we have seen, is behavior motivated by a distress and involves essentially all behavior. Conduct is calculated either natively, or through learning, or as random exploration, to cancel or to reduce its initial irritant, its motive. The experience of a dwindling or an erased misery is what we call pleasure. Happiness is not the mere absence of distress; that would be either sleep or, more correctly, death. Happiness involves or exhibits a lively interplay of distress and pleasure, when ready techniques are available for the conversion of the former into the latter.

Conduct is justified first of all by the distress that initiates it; secondly by its success in alleviating that and other distresses. As qualifications or criteria of that success we may enumerate such factors as promptness, completeness, ease of execution, permanence, and absence of new distresses in the actor or in others, resulting from the act.

Other things being equal, that conduct is best that most quickly effaces its motive; that involves the least effort and cost; that reduces not only the immediate pang but also the

likelihood of its recurrence; that results in a minimum of compensatory or correlated distress either in the actor or in any other creature.

Thorndike advocates a weighting of satisfactions of all sentient creatures, with different weights for present and future men, snails, lizards, and deities. Some of the utilitarians of earlier periods insisted instead that each creature was to "count for one." Since we are not primarily interested in social engineering but in the individual, we leave it to the moralists to do the counting in whatever way best relieves their distress. Some such counting or approximation underlies every code and all systems of rules and laws, whether determined by the subjective feelings of a dictator or by the votes of those who are governed. More scientific counting than this has made little progress, but suggestions toward possible advance are made in a later section of this chapter, dealing with the relative misery of certain distresses, mutilations, and deprivations, and with hierarchies of techniques.

There are more socialized criteria of excellence which follow from these qualifications. There are various *ways* of eliminating a motive, and some of these are more highly prized than others. A distress may be relieved by direct action upon it (as by surgical operation, anesthetics, opiates, narcotic drugs). It may be relieved by distraction, that is by preoccupation with other things that withdraw attention. It may be relieved by attacks upon the environment of things, people, or social relations, so that external agencies in part responsible are rendered innocuous. It may be relieved by retreat into a world of fantasy and delusion in which inner symbols achieve dominance over the impacts of social reality. It may be relieved by a change of viewpoint or attitudes so that a new interpretation robs events of their sting by changing their perceptual character. It may be relieved by emotional transvaluation which makes the endurance of the distress into a virtue and the sufferer into a hero. It may be relieved by exterminating, through violence or natural selection, those sensitive to it. In fact one or another ethical cult may appear to have been based more or less on a predilection for one or another of these techniques.

The hierarchy of dignity or advantage which these techniques assume is however mainly contingent upon the degree to which they achieve the primary criteria of promptness, completeness, expedience, permanence, and absence of correlated miseries, in the actor or in others. The valuation of these techniques is likely to vary with the nature of the distress, and especially with the individual concerned and the degree of his socialization. On the whole the sufferer is likely to be more impressed by such criteria as promptness and expedience, somewhat less by completeness and permanence, and least of all by correlated miseries of his own or of others. Others, instead, are more likely to reverse this hierarchy of preference. The reason for this is the simple law that consequents evoked by reduced cues (hence the distresses due to sympathy) tend to be weaker, slower, and less complete than those evoked by total original contexts.

Hierarchies of Distress

We must add to all these criteria of conduct another, and probably the most imposing one, so far as anything like moral evaluation is concerned. This is the fact that there are, or come to be, both in the estimation of the individual and in the sanctions of the community, hierarchies of distress. Some pangs, shames, irritants, and other forms of discomfort or humiliation are more disagreeable, more motivating, than others, and acts are valued according to the intensity of the misery they relieve.

Extremely interesting, though in some ways bizarre, attempts have been made by Thorndike to measure such things as wants and deprivations. The measures of wants concern us little, for wants (desires, wishes) as we have seen are on a secondary psychological level. Wants and desires are pictures of some technique, object, or situation as conjectured remedy for primary distress. The degree of a distress and the intensity of a want for some one solution may be very different. But the evaluations of deprivation, mutilation, and the like come close to being estimates of primary distresses.

The following are a few typical samples of what happened when individuals were asked to estimate the amount of money, to be spent only on themselves, for which they would endure certain specified distresses:¹

Deprivation or Mutilation (Selected from a Longer List)	Median Amounts of Money for Which 39 Individuals Would Endure Them
Spit on a crucifix.....	\$5
Drink enough to become thoroughly intoxicated	50
Take a sharp knife and cut a pig's throat.....	500
Have one upper tooth pulled out	4,500
Choke a stray cat to death... ..	10,000
Eat a live beetle one inch long.....	50,000
Become entirely bald.....	75,000
Have a little finger of one hand cut off.....	200,000
Live the rest of life on a Kansas farm ten miles from any town.....	300,000
Have all teeth pulled out.....	750,000
Have one ear cut off.....	1,500,000
Become unable to taste.....	5,000,000
Have one leg cut off at the knee	40,000,000
Become totally blind.....	No sum big enough

The thirty-nine subjects whose results are here cited were all destitute recipients of public relief under thirty years of age and were supposed to be "especially sensitive to the value of money." The figures may belie the latter assumption, and some light is perhaps thrown on the earlier qualifications by the exorbitant demands these people would make for such commonplace acts as butchering a pig or living on a farm. But however bizarre the results, and however exceptional the subjects, there is illustrated for this group of people an estimated hierarchy of distresses in terms of a common medium of exchange. Even a radical revision of the absolute sums might nevertheless leave these relative ranks pretty much the same as they are now, ranging from distresses that might be regarded as trivial to those of extremely high degree, thus illustrating in a more or less ri-

¹ For the complete report see Edward L. Thorndike, "Valuations of Certain Pains, Deprivations, and Frustrations," *Journal of Genetic Psychology*, Dec., 1937.

diculous way what we have in mind when we refer to a hierarchy of distresses.

But there also comes to be a socially determined hierarchy of distress, a conception of what the individual hierarchies *ought* to be, and an endeavor to impose this upon individuals by sanction and taboo, reward and punishment, precept and example, and especially through what is called "socialized education" and "moral instruction." In this hierarchy some pangs are minimized; they are to be endured however great their individual urgency, perhaps because their prompt alleviation by individual action would entail correlated distresses, perhaps weaker ones, on others, and perhaps on many others.

Hierarchies of Techniques

Sometimes it is not so much the distresses that are ordered in a hierarchy but rather the techniques of alleviation. The general facts of technique preference are familiar enough. Thus the impulse to immediate revenge should be inhibited and its irritant suffered while the slower processes of the law take their course. At least some of us have been taught this, and sometimes the law expressly says so. Controlling children by telling them the truth is recommended rather than intimidating them by specious deceptions. Orderly marital relations have a sanction not accorded to impulsive promiscuity. Such cases represent simple instances of differential value attaching to alternative methods of relieving a distress. The hierarchical status of such techniques is more apparent when there are a considerable number of alternative solutions. Here again we may find somewhat striking examples in some of the experiments of Thorndike.²

Groups of judges, for example, were asked to rank in value or otherwise rate fifty ways in which a specified man might spend a period of freedom from his regular work. The activities ranged from generally approved to generally disapproved.

² E. L. Thorndike, "Valuations of Achievements, Acts, Laws, and Persons," Ch. 6 in A. A. Roback *et al.*, editors, *Albert Schweitzer Jubilee Book*, Cambridge, Mass.: Sci-Art Publishers, 1946, pp. 149-169.

The consensus of opinion along with the distribution of votes enables the investigator to assign numerical values to each activity. These values constitute a hierarchy ranging (with one group of judges) from a positive value of $+6$ to a negative value of -10 . "Going to a symphony concert" has a value of $+5$, "writing poetry" a value of $+2$, "teasing the monkeys in the zoo by holding out food and pulling it back when they reach for it" a value of -4 , "going to a prostitute" is rated -10 . These particular values are median ratings on a scale ranging from $+10$ to -10 , made by twenty-two persons of superior intelligence.

In a similar experiment such judges ranked the eligibility of twenty-five men as husbands for a sister or daughter. By special procedures the median ranks are given comparative values in terms of a statistical unit. The twenty-five candidates stand in a well-defined hierarchy. At the top, with a value of $+3.2$ units, is "A factory owner, a college graduate, earning \$7,000 a year." At the bottom stands "A feeble-minded man with I.Q. of 70 and an income of \$12,000 from trust funds," with a negative value of -1.1 units. Between these two extremes the remaining twenty-three candidates stand, showing varying degrees of eligibility and neatly illustrating the concept of hierarchy of means as we here use it. The reader is referred to Thorndike's original report of these and other related experiments for numerous interesting comparisons, suggestions, and conclusions, and for indications of the bearing of such experiments on moral issues.

All such social hierarchies (and they differ notoriously from group to group and from epoch to epoch) are derived ultimately, and often through a long history of social experimentation, from some sort of calculus of distress, in which an endeavor, usually tentative and wholly impressionistic, is made to let the motives of all concerned count for something. It may even be wrong to call it an endeavor. What really happens is that the motives of all concerned *do* count, and the ethical hierarchy and behavior prescription, and to some extent the laws and statutes, come to embody as best they can the net outcome of this synthesis in an age gone by. Such hierarchies, by the technique

of the neurosis, tend to persist by their own inertia, and any remodeling of them comes in its turn to suffer the same fate.

The suggestion that there can be a calculus of distress or misery is far from absurd. It is by no means as preposterous as the theory of a calculus of pleasures which has long had a philosophical prestige. For miseries are actual; they are here and now; while the pleasure to be experienced in their relief is hypothetical. It is fairly easy to estimate the pain of a tooth-ache; much less easy to compute the pleasure that might conceivably result from its relief. Distresses are concrete, more or less individual, and specific, as compared with the greater tendency of pleasure to be diffuse and algebraically summative, vaguely dependent on many factors of a context.

Even on the plane of hypothesis it is easier to estimate the distress that would be involved in, say the loss of an arm, being deprived of tobacco, or compelled to eat a beetle, than it is to estimate the pleasantness that is now attributable to the absence of these necessities.

The "good" act is therefore one that annuls the irritant or motive that evokes it. The best act is the one that does this most effectually, that is, promptly, completely, and permanently. Good acts will be socially esteemed according to the degree that in relieving the distress of the actor they do not entail correlated distress on the part of others and if possible actually aid in the communal relief, and also according to the place of the distress and of the technique in the contemporary approved hierarchies.

The Happy Life

The happy life is therefore not to be conceived as one in which there is no motivation. Without distress nothing would ever happen and activity would be at a minimum, as it is in sleep. The happy life is not to be conceived, according to our account, as such a torpor, and heaven is not to be pictured as a condition in which people lie inertly about in a prolonged apathy, because they neither suffer distress nor know pleasure.

Happiness is the condition in which distresses are met with

a ready technique or repertoire of adjustment. It is best illustrated by the behavior of children who, once having mastered ways of saving themselves from certain dangers, actively court those dangers for the fun of saving themselves. The heavenly life is the life of masterful adventure.

Except perhaps for the extremes in each case, happiness is equally possible for young and old, poor and rich, dull and bright, ignorant and learned, employees and employer, followers and leaders, the man with the hoe and the man with the white collar. Its liveliness may be the same on widely different levels of health, talent, intelligence, power, resources, and responsibility. The village grocer may achieve a repertoire of techniques for handling his problems that will make him as happy as the big merchant of the city. He may indeed, through the exercise of this repertoire under democratic conditions, transform himself from the one into the other, only to find his woes increased.

Any scheme of reform that aspires to ostracize distress from human life is bound to defeat its own aim. If it could succeed it would do so only at the cost of life. For life, as Spencer nearly discerned, is the adjusting of internal and external conditions, one to the other. That is to say, life is the process in which distress in the individual is alleviated by mutual adjustments of the individual and his world. To be continuously active in such adjustments is to be alive. To have no distresses is to have no motives, and therefore no personal existence. The nearest pictures to this, in creatures still alive, are the stupor of deep sleep and the profound apathy of the deteriorated schizophrenic. These are certainly no models for a Utopia to set before itself, although certain Oriental cults are said to have recommended such a Nirvana and a Christian saint on the Isle of Patmos contemplated such a condition as a realm of bliss.

If "Heaven lies round us in our infancy" it is only because the skilled techniques of others are put at our disposal so that we command them by our whimpers, whines, and howls. This, certain psychoanalysts maintain, is an imperious period of apparent omnipotence, and a deceptive one, to which some baffled adults long to retreat, in regression. Whether this be sound

psychology or not, there is enough truth in it to suggest that growing up involves freeing one's self, so far as possible, from the ministrations of the cradle and the tribe and developing a repertoire of techniques for achieving one's own salvation. Current trends in the opposite direction can result only in perpetuating the cult of immaturity.

The morality here portrayed is neither that of slaves nor that of lords and masters. It is the morality of the individual who stands squarely on his own feet. It is the morality of the old woodsman who, alone and unarmed, and far from help, encountered in his path a ferocious bear. And so he prayed, and this was his prayer: "Oh, Lord, I never did anything to make you want to help *me*; all I ask, Lord, is—don't you do anything to help *the bear*. And then, Lord, if you want to see a good fight, just stick around."

The techniques available for salvation (happiness) are indicated in our original list of categories of the imperative. All of these oughts, as we have seen, are essentially proclamations that "This is the way." Some of them depend primarily on native endowment and insight. Witness the implication of the logical imperatives, the comprehension and synthesis of Gestalt demands, the sensitiveness that underlies the oughts of esthetics. Some of them depend on emotional liveliness and variety, as in the imperatives of esthetics, religious scruples, and the oughts of social welfare with their technique of sympathy. Some of them, perhaps all of them, depend also notably on a rich fund of experience, acquired through discovery and learning, as shown especially in the imperatives of expedience, hygiene, and convention. All of them, and especially the imperatives of justice and equity, call for an optimum degree of scope or sagacity, which brings to bear on each act or decision the most relevant configuration of considerations and influences, both from present and from past contexts. All three of our fundamental principles—motivation (distress), learning (cue reduction), and control (scope)—cooperate in providing the foundation of moral action or "good conduct," just as together they afford the descriptive framework for all mental activity.

The viewpoint here advocated is in harmony with develop-

ments in fields other than ethics. It emphasizes education rather than social reform. It stresses the equipment of the individual for constructive living rather than the promotion of a spurious sense of security by the paternalistic removal of obstacles. This emphasis comes from the definition of happiness as the possession of an adequate repertoire of techniques rather than the somnolent state in which there are no active motives (distresses). It agrees with a popular maxim that has long had established repute among sportsmen and which asserts that more happiness is derived from pursuit than from possession.

Our viewpoint supports moreover the newer educational doctrine that subject matter and memory drill are of less value than the acquisition of effective interests, methods of work, and an attitude of inquiry. It encourages academic progressives rather than the fundamentalists. In the field of re-education, the clinical reconstruction of the individual, the viewpoint again accords with the newer procedures. It would make immediate symptomatic relief subordinate to the development of attitudes and insights that will preserve the individual from such distresses as those he complains of. It would thus make the comfort of the patient grow out of an activity of his own rather than from his manipulation or guidance by the therapist.

In harmonizing with such modern developments the viewpoint here formulated contrasts emphatically with socialistic and communist philosophies that have achieved recent favor. These philosophies, however diverse, have in common a principle that we find to be psychologically unsound. In its extreme form this is the belief that happiness will be universal if the world is so reconstructed that it contains no irritants. So far is this from the truth that it contemplates precisely the kind of world in which there could not possibly be any such thing as happiness.

The Completely Ethical Act

What would be a completely ethical act? One answer might be that such an act should be consonant with the obligations of all the chief categories we have described. It should at one and

the same time be logical, beautiful, Gestalt-fulfilling, socially valuable, healthy, useful, customary, equitable, dutiful, and legal, for all concerned. Perhaps such acts are possible; but most of the things we find to do are likely to fall far short of this standard. Beautiful things, or certainly useful and gestalt-fulfilling things, may be illegal or unconventional. Logical and just things may lack beauty, social value, utility, customary sanction.

We might instead consider a wholly ethical act one which, while perhaps not consonant with all the types of obligation, has taken all these dimensions into account. Each ought has been evaluated, the bearing of all of them synthesized and balanced, along with attention to the prevailing hierarchies of distress and of techniques. The decision reflects full scope and represents the best possible approximation to perfection, even if some obligations must be violated.

Even as thus described a completely ethical act would be a miracle. Certainly the hurried and poorly informed life of human beings does not permit the elaborate synthesis of evaluations and balancing of obligations here indicated. A similar objection was made to the doctrine of the utilitarians and their "greatest pleasure for the greatest number" principle. The reply was sometimes made that of course individuals do not pause for such a quantitative assessment before they move. Long experience of the race and the advice of revered guides, lawmakers, teachers, and philosophers have long since worked out and conventionalized or codified the decisions. The individual only adopts and follows these sanctions, unreflectively.

Our own reply must take a somewhat different direction, for we have insisted that a thoughtless act is scarcely a moral one, no matter how respectable it may be. Even if a completely moral act, one confirmed by all the varieties of ought, or one taking them all into account, is a superhuman achievement, there may still be ethical conduct. Just as there are degrees of red, of noise, of distance, so there are degrees of moral quality. The act that is dictated by any one or more of the imperative oughts is *to that extent* meritorious. The completely ethical act, even if it should be impossible of realization, may remain a

goal toward which conduct aspires as its moral quality expands under the influence of greater scope. That actual approximations to this goal are pitifully incomplete is only a commentary on the limitations of our nature and our circumstances.

Even the most decent acts may therefore have low moral quality, if they have been learned by rote from teachers who also learned them in this way. In the course of time such acts, unchecked by new reflection and alert scope, may become socially neurotic—productive of rather than therapeutic for human distress. The moral act is always based on reflection, but when good acts are merely imitative of the behavior of wise teachers it is the decisions back of those acts that are ethical; the acts themselves are only acts of obedience.

Hypothetical Instances

Perhaps we can get closer to the ground by observing the way in which the array of imperatives and the rudiments of morals converge in a typical case where action is indicated. A student with no resources except her earnings is worried over her sick sister who needs an expensive period of hospital care and perhaps surgical treatment. The student is employed by a wealthy man to tutor his motherless daughter during the summer and be her companion on a foreign tour.

All this is a very ordinary pattern of life, and it is shot through and through with motivation, that is, distress. The sick sister is in distress, and this distresses the devoted but poverty-stricken student. The widowed manufacturer, in spite of his wealth, is needy and distressed. He needs someone to help care for his helpless and uneducated child, who is distressed also because she has lost her mother and needs companionship, guidance, and instruction.

On the tour the two go for a walk on a winding mountain road. The tutor tires and lags behind, while the pupil bounds gaily up the road and out of sight. By the roadside the tutor finds a purse, immediately recognized as belonging to the pupil who has unwittingly dropped it in her exuberant activity. In the purse is a comfortable sum of money, drawn by the pupil

for the next few weeks' travel expenses. There are abundant additional funds in the letter of credit lavishly provided by the pupil's wealthy father, and this letter of credit is safely deposited at the hotel where the pair have settled down for a sojourn in the mountains. What ought the tutor to do?

She can hold the purse until she catches up with the pupil and restore it to her, undamaged and unemptied, with a lecture on carelessness.

She can safely conceal the purse until it is convenient to remove and appropriate the money, then destroy the purse. When the pupil misses it the tutor can join in a vigorous search, announce the loss at the hotel, and advertise a reward to the finder.

If she adopts the first alternative, and restores the purse and money to the pupil, the child will grin, say "Thank you," and forget the matter. That will end the episode, objectively, although the tutor may never cease to regret her naïve and impetuous honesty.

If, instead, she takes the money, she can at once relieve her distress concerning her sister's needs and relieve her sister's distress also. The carefree pupil will simply draw again on the letter of credit. The wealthy father will never know about it, and if he should, the loss of that sum would occasion no great distress in him.

What ought the poor student to do?

Actually of course she will probably adopt one or another of the alternatives without delay; and which one is chosen will depend on the whole life history and personal make-up of the tutor—on what we call her character. Countless "considerations" will focus on that moment, without even being clearly "considered," and by the net outcome of their synthesis we will pass judgment on that character. We may call her a coward, a thief, an honest girl, a boob, a hero, a saint, or a fool, depending on our own evaluation of her act, and this evaluation will depend on our own life history and personal make-up.

If the tutor were more pedantic, she might take time to analyze the situation and identify these considerations. She would by so doing perhaps lose her opportunity, but she would exhibit for us a great complexity of imperatives, converging

with various directions and strengths. As we have seen, there are many varieties of oughts, and for her to obey one of them alone would have been to act without scope. And anyone who insists that there is only one criterion to be applied to her predicament is simply imposing his own narrow viewpoint upon her conduct. An act is justified by the distress that occasions it; by its effectiveness in annulling this distress with the greatest possible permanence and the least correlated distress for the actor or for others. But there are, in a given setting, hierarchies of distress, and also hierarchies of the approved techniques.

There are plenty of distress-relieving inducements for her to keep the money: imperatives of logic ("this ought to be enough to save my sister"); imperatives of Gestalt ("this is just what our situation requires to make a perfect ending"); imperatives of utility ("taking this is the most expedient way to solve our problem"); imperatives of safety ("this ought to restore my sister's health").

There are also oughts calculated to give her pause. She does not admire people who take other people's things (esthetics). Ladies are not supposed to take other people's money (convention). Mother disliked thieves; the Bible says "Thou shalt not steal" (conscience). Society would be disturbed if people did not respect property rights (welfare). It would be unfair to violate her employer's trust (justice). It is a crime to take other people's money (legislation). On all these counts taking the money would stir up an array of new distresses, in her or in others, that would have to be balanced against her own poverty and her sister's illness. There would be distresses of remorse, of fear, of shame, of punishment, of loss, and so on.

What then will really happen? How will all these conflicting and reinforcing imperatives combine and integrate into a final consummation? She ought to take the money and she ought not. To expect her to wait until all these considerations are marshaled, evaluated, balanced, and algebraically tallied would be to require more scope than any young tutor is likely to exhibit. She will act more or less impetuously, with but one or two considerations in mind, and then perhaps spend the rest of her life

reflecting on the imperatives she neglected. And what the first one or two considerations are will determine whether society classifies her as saint or delinquent.

Of course we make no predictions about this girl; we know too little about her. But as a fictitious example she helps portray the complexity of conduct imperatives, and she serves briefly to indicate the kind of analysis that is merited by any prescription or exhortation containing an ought.

The reader may find it instructive to decide for himself what the girl ought to do. It may be equally useful to consider what *he* would do under similar circumstances. Such reflection is likely to bring into clear light the individual's own hierarchy of distresses (motives), as well as the native and acquired attitudes and values that play a part in his own ethical judgments.

It is still more instructive to consider in this way some dilemma in which the force of police regulations does not give obvious overweight to one consideration or ought. In the foregoing example many determinants are already so strongly set that other considerations may not receive the attention to which they might, in some other culture, be entitled. Only in a capitalistic economy, for example, where private property is a basic principle, would the moral aspects of theft loom large; in fact only there could there be such a thing as theft. The impoverished tutor in our example therefore confronts a regime in which certain modes of behavior, such as stealing, are subject to police regulation in a manner that might be considered to be morally arbitrary.

A great many situations in which obligations or imperatives are involved follow a different pattern, one in which the law does not play a deterrent or a deciding hand. Consider the case of a young married couple and the problem "Ought we to use contraceptives?" Here there may be a real weighing of imperatives in which the police force plays no part. What *ought* a young couple to do in such a connection? It is apparent at once that, even with the police eliminated, the imperatives are complicated and the definition of duty is no simple matter.

There are religious edicts on such topics and the Bible says "Multiply and replenish the earth." There are such obvious

social welfare motives that strong pressures are applied, as in art, in literature, in folkways and approvals, to induce women to bear children. Rules of hygiene might even be adduced in favor of offspring, and a home without children might be felt to be an incomplete Gestalt. Custom and convention also suggest the advisability of a family of children—everybody's doing it!

On the other hand motives of esthetics and personal pleasure, utility and convenience, and even justice and equity may work in the other direction. Personal taste may be for irresponsibility; children may interfere with plans for a career; it may be unfair to bring children into a world marked chiefly by war, disease, inequality, and suffering. Each of such considerations is an ought. The moral obligations of the young couple, even with respect to this single item of conduct, are manifold and complex. Each of the motives is a valid consideration; a final verdict can be achieved only by:

1. Blind following of one imperative, as if the others did not exist. But this is to act without scope and presumably represents a low degree of insight.
2. Tentative consideration of two or more of the operative imperatives with choice simply of the one that appears to be strongest. This would still be impulsive behavior.
3. Reflective weighing of all the oughts involved, consideration of the hierarchy of distresses as these appear to the individual chiefly concerned, synthesis of compatible motives on the one hand and incompatible on the other hand, so that final judgment will appear to represent action correlated with minimum distress of all concerned. This would represent action based on full insight and exhibiting full scope.

Finally, a useful case for exhibition of the complexity of imperatives is that of a boy and girl, unmarried but in love, and with every opportunity to indulge their mutual impulses to limits set only by their own discretion. What are the imperatives operative in shaping this discretion? Ought they freely to follow the lead of momentary passion to final consummatory activity and sexual union? Or ought they to hold

their impulses in check for the time being and rest content with preparatory and intermediate amatory expressions? Does the issue rest on the coercion of some one imperative? Or how shall the manifold of obligations be brought into play and a final synthesis and moral evaluation be achieved?

The outcome of any such deliberation as those we have here hypothetically sketched depends of course not only on the multiplicity of the imperatives bearing on the situation, and the individual's scope for these considerations, but also on their own relative strength for him. The relative strength of these imperatives varies from person to person, perhaps from time to time, and most certainly from one culture to another. If we could determine in something like quantitative terms, or at least in the form of an order of merit, the place of each of our fundamental categories in the evaluations of an individual, and if we could measure in some average fashion the relative strengths of imperatives and obligations belonging under these various categories, we should then have the moral picture of the individual. Such a picture might well be more informative than most other portrayals of his make-up. The hierarchy of distresses and their relative strength in the individual are among the most significant things to know about any personality. Character education has for its aim the modification of such pictures to fit the pattern current in the contemporary epoch.

It will of course be observed, and perhaps complaint may be made, that in none of these cases have we prescribed the course which the individual is to take. We have not committed ourselves to any assertion of what in final analysis the resultant conduct ought to be. We can say only that it ought to be such a final resultant. The imperatives of conduct are many, and all of them are real and authentic. Our own concern is only to insist that conduct is not really moral, and is not sagacious, unless it is based on a degree of scope that takes at least a respectable number of these imperatives into joint account. For us to urge the merits of one imperative as over against another would be special pleading, propaganda, and strongly suggestive of narrow-mindedness if not of vested interests.

Such special pleading is in fact not unknown. In recent

years it has often been asserted that the world needs a revival of morals. The particular variety of morals is sometimes not specified, but equally often some limited category of obligation is indicated. One exhorter asserts that man has an "innate moral sense" and that this is what should be rediscovered. Another declares that there is an "absolute moral" and that this is the ethic that requires recognition. Still others make it very clear that they mean by the revival of morals the return to religion, the code to be respected being "God's will."

We believe instead that the morals of tomorrow must be more eclectic than any single dogma and more inclusive than any vested interest or favorite enthusiasm. Whatever else the good may be, we find that it fluctuates from moment to moment and from viewpoint to viewpoint. It is, or may be as the case requires, the logical, the beautiful, the complete, the socially valuable, the healthy, the useful, the customary, the equitable, the dutiful, the legally approved. The Good, in fact, can be no less than an insightful synthesis of the considerations underlying all these imperatives.

Diversities of Ethical Theory

A brief glance at some of the classical ethical theories will serve to focus attention on the peculiarities of our own viewpoint. Heraclitus regarded "the bright and dry" as warring with "the dark and moist"; victory for the former was the aim of moral life. Did he mean by "dark and moist" what we have called *distress*? Was the "peace" or "pleasure" of Democritus the alleviation of irritants? From the earliest ethical speculation the ascetics (Cynics, Stoics) have been contrasted with the hedonists (Epicureans, Cyrenaics). The former would preserve themselves from distress by disclaiming it; the latter, however much they may have emphasized "pursuit of pleasure," were really seeking delivery from annoyance.

According to Mackenzie (*Manual of Ethics*, p. 155), "Three schools, the Intuitionist, the Rational, and the Utilitarian, were the main lines of modern ethical thought, until the school of the modern Evolutionists arose." The Intuitionists

assume a direct moral sense, similar to esthetic appreciation, which reveals "the difference between right and wrong" and brings it about that "what is beneficial to society strikes one naturally as good." This school, aside from its doctrine of innate perception, which like the Gestalt theory discounts experience, seems to bank heavily on but one or two of our list of imperatives, such as Welfare and Gestalt.

The Rationalists, emphasizing such concepts as the logical, the consistent, and the fitting, lean heavily on the categories we have called oughts of Inference, Gestalt, and Justice. Early Platonists and modern logical idealists belong in this group, with their ideas of the Absolute, the Universal, and the Great Community.

The Utilitarians, seeking to define more precisely the meaning of "beneficial to society" arrived at the bipolar concept of *happiness*, defined by Mill as "the presence of pleasure and absence of pain"; the Utilitarians are modern hedonists. But pursuit of pleasure which does not even exist until the activity accomplishes it is a curious concept; actually it is the pain that activates even the Utilitarian, who may well recognize our whole array of imperatives.

The Evolutionists differ among themselves. For Spencer good conduct is that which promotes the final end of biological adjustment and survival. But obviously the end or result of an act can have nothing to do with its initiation, for the end is a consequence, not an antecedent. Still, Spencer also agrees that good conduct produces pleasure, and bad conduct pain; that most conduct does both; and that the surplus is what finally counts. This takes us back again to the hedonists, with their bipolar account of motivation. For the most part Spencer's account hinges on the categories of welfare, hygiene, and utility. Leslie Stephen, another Evolutionist, states the position even more restrictedly when he says "A moral rule is a statement of a condition of social welfare." But this, as we have seen, is but one of many imperatives, and it is far from clear why it alone should be identified with the moral.

There is no need to rehearse here the history of ethical thought. We make these few references to the classical sys-

tems to illustrate the fact that each is likely to be partial and overzealous in its endeavor to base all good things on one or another of the long list of available oughts. Perhaps the chief outcome of our own analysis is the emphasis on the *number* of categories required to give a reasonable classification of imperatives, and therefore of ethical criteria.

But we also reject the bipolar account of motivation and the teleological theory of conduct. We cannot see how a non-existent pleasure can explain an actual activity that precedes it in time. Conduct we find to be rooted in motives which instigate acts in the interest of their removal. This removal is pleasant, but this is a result, not a provocation. So long as everything is satisfactory, that is, so long as there are no irritants, no one does anything.

Neither can the goal or outcome of an act be its motive. The picture or thought of an outcome may to be sure become determinative, but only in so far as, being mere picture and not reality, it is unsatisfactory or distressing. Of course the thought of a joy that we do not have is not a joy.

Happiness for us is neither the mere absence of irritants nor mere apathy with respect to them, nor the mere accrual of pleasure or surplus of pleasure over pain. It is the possession of an adequate repertoire of constructive techniques for the amelioration of our distresses, these being the stimuli that keep us alive and awake. This repertoire, moreover, and the personal evaluation of miseries are, in the good man, more or less in accord with the prevailing hierarchies of the culture or epoch appraising him. It is thus that one, in his own time a malefactor, may for a later generation become a holy man. It is thus that a crown of thorns may become transformed into a crown of glory.

CHAPTER 8

A PROGRAM OF MORAL INSTRUCTION

It is part of my happiness to lend a helping hand,
that many others may understand even as I do, so
that their understanding and desire may entirely
agree with my own.—SPINOZA.

The Moral Quality of an Act

It is important to recognize the distinction between approved behavior and moral conduct, between obedience and insight. The two are often confused. Ethical tests have sometimes been proposed which estimate the degree to which an individual's behavior or decisions meet with the approval of others. Lists of acts are provided and these items are to be checked as right or wrong. Or alternatives of conduct are described in some situation and one is invited to indicate the better or the best of these alternatives. Or dilemmas are described and one is required to state the way in which he would act under such circumstances. Such behavior inventories may reveal important information, but they do not disclose the ethical characteristics of the individual's insight. It is one thing to act in approved ways and quite another thing to understand the basis of that approval.

Many of our adult activities are dictated by rules and laws which we little understand. We write down numbers in certain arrangements and perform particular operations with them. We are confident that this will bring us the right answer but could not easily explain why it does so. A carpenter can test the squareness of a framework by measuring off points six feet from the corner on one side and eight feet on the other, then shifting things until these points are ten feet apart. His structure is then squared off, but never having studied geometry

he does not know that this is because the square of the hypotenuse of a right triangle is equal to the sum of the squares of the other two sides. In the same way we all comply with innumerable ordinances, maxims, and laws with little appreciation of the reasons why they were established. Since we act in these ways, our arithmetic is accurate, our buildings are laid out correctly, and our ways are law-abiding. But this gives our conduct little or no moral quality, for we can follow rules and obey signals with no insight into the reasons for our imperative acts.

The situation is even clearer in the case of children. They may be taught to eat with the fork, to brush their teeth, to avoid thin ice and obscene words, to tell the truth, to kneel in church, to salute the flag, to give precedence to females and the aged, and to do a thousand things that make them "good children." The most that can be said of such early conformity is that it is obedient. It may be wholly lacking in ethical quality, or belong at most on the level of primitive deterrent morality that is based on fear and repetition.

Indeed even the lower animals may be taught desirable habits and trained to exhibit the virtue of obedience. They may learn to do or not to do, at command, by intelligent teaching and selection of signals, a surprising number of things. These signals may come to have an imperative force so strong that they may outweigh many of the animal's more natural impulses. But the acts are only acts of obedience. They lack moral quality because the animal has no insight into the considerations that govern the evaluation of his behavior. In the language of the courts "he does not know the nature and the quality of his act."

Morality might be said to begin when rules are formulated and observed by the actor himself. Rules may be generalized, that is, applied to acts and situations not explicitly covered by special training. Rules in turn give rise to codes and to sets of laws. Rules, codes, and laws, however, may be meticulously observed with little or no appreciation of the nature of the obligations which underlie them. It is the degree of this appreciation that measures the moral quality of behavior, not conformity of conduct to some predetermined array of sanctions and taboos.

Ethical Codes

An examination of codes of conduct, ancient and modern, shows that most prescriptions of this sort make little or no demand on the insight of the individual who is to follow them. Often enough there is reason to believe that the code-makers possessed a degree of understanding that they did not exact of loyal followers. One can explain this easily enough in the case of the more ancient codes and commandments. In those days well-informed and philosophical leaders were scarce and people in general were limited both in experience and in knowledge. It may have been more important for them to do the right things, which of course includes not doing the wrong things, than for them to understand the reasons why.

But there are available compilations and comparisons of ethical codes of more recent date.¹ Examination of such creeds and sets of rules reveals a similar picture. For the most part they are as dogmatic, dictatorial, and arbitrary as the ancient codes. They are apparently to be received on faith, from authorities who may or may not have more profound understanding of their urgency than the recipients do. Their observation is to be encouraged by cajolery, flattery, threats of calamity, or tidbits of reward. Observation of the rules makes one a "good" member or follower; violation of them may result in expulsion.

Rules accepted on such a basis may appear to have equal sanction unless the individual himself questions them and undertakes their analysis. He may then realize that their respective motivations are not only different but also of varying urgency. This may happen, but the codes seldom make a point of inviting it. The Decalogue, for example, gives no intimation that working on Sunday, adultery, murder, idolatry, and profane language offend different principles and may be unequally reprehensible. Not long ago many children of religious parents were brought up under a doctrine which put smoking, card-playing, dancing, going to the theater, and playing marbles

¹ P. R. Symonds, *The Nature of Conduct*, New York: The Macmillan Co., 1928; E. L. Heermance, *Codes of Ethics*, Burlington, Vt.: Free Press Printing Co., 1920.

"for keeps" in the same category of sin, along with murder, theft, and fornication.

Naturally enough, when in later life such children find reason to repudiate one of these commandments, all the other imperatives tend to go up in smoke also. And why should they not, when no occasion had been given for learning their different grounds and origins and the varieties of distress that motivate them?

Character as a set of established habits and character as a pattern of insight are two very different things. The first one can be set up in a horse, a dog, or a young child by the techniques of repetition and cue reduction. The latter calls instead for the individual's use of his own understanding, for breadth of vision, for what we have throughout this volume been calling *scope*. Our present complaint is that moral instruction has depended too much on cue reduction and too little on *scope*. What then can be done about it?

There need be no abandonment of the type of moral training that instills unquestioning habits. It may even be that for half or more of the population (the duller section) this will remain the sole effective procedure. Of these it may be enough to exact obedience, with little or no expectation of understanding. For those capable of understanding the differences between the various forms of obligation that we have here considered, a second form of moral instruction seems indicated. It is all the more strongly indicated when we realize that it is this group who are to formulate and interpret the moral codes of tomorrow. Such instruction might include early development of and ready familiarity with the chief categories of obligation and practice in applying them to concrete acts and consequents.

Tentative Outline of a Program of Instruction

Such a program of moral instruction exists almost ready made in the outline of this volume. It might consist of twelve lessons or sections: first a general orientation in the meaning and varieties of requiredness; then ten succeeding sections, each dealing with one of the chief categories of obligation; and

finally a résumé, with tests and measurements of the degree of insight achieved and such "remedial instruction" as the individual scores and other personal data might justify. In the Appendix² we have given a somewhat detailed analysis of the subject matter that might be found useful in such an array of lessons, with a few references under each heading for those interested in endeavoring to organize a course of instruction of the kind here sketched.

A more detailed statement may be made of the educational objective of such a plan. The first aim, as in so many educational endeavors, is to promote first-hand acquaintance with materials—to provide concrete experience. Understanding and appreciation of relations in any field require familiarity and direct encounter with the related things. Closer acquaintance with objects in a given realm facilitates perception of them and directs attention to harmonies and discords otherwise unheeded. A few examples may be briefly indicated.

Many of the canons of esthetics are unrecognized by those having little or no experience with the materials, the forms, and the activities of the artist and designer. Musical composition and theory involve numerous requirements and obligations felt only by those with direct musical experience. Higher mathematics presents many relationships of necessity, of expedience, of implication, of beauty, of completeness, that can be known only by those versed in the operations and materials of the mathematician. The conventions and customary etiquette of social intercourse are neither known nor appreciated by the hermit, but only by those with a life history of social participation. Logical fallacies and inferences that seem obvious enough to the sophisticated are not always apparent to the child or to the illiterate adult. Some participation in the life of reason is required to enable one to appreciate and identify the oughts and ought nots of argument and evidence. One must first ascertain the rules of chess, of football, of chivalry, of parliamentary order, of a liturgy, before he can be expected to realize the obligations and requirements which these involve.

² See Appendix 4.

The Educational Goal

The first aim of instruction, therefore, is to introduce the student to the materials and the imperatives in each of the fundamental fields, so as to guarantee that he has direct experience with at least an adequate array of samples. He must, for example, have first-hand acquaintance with a few oughts and ought nots of esthetics, a few experiences with such requirements as are involved in beautiful arrangement, proportion, composition, balance, combination, and design. Then he must likewise become explicitly familiar with the forms and patterns of argument and induction, with typical syllogisms, fallacies, types of evidence, logical controls, and sources of error in thinking; and so on for all the other fundamental varieties of imperative, the fields of welfare, hygiene, etiquette, efficient technique, codes and creeds, and statutes and legislation.

These bare intimations of the contents of such a course of instruction may indicate one of the reasons why such a course has not been organized long ago in our schools. Think of the specialized knowledge required in order to conduct such a program. The teacher would have to be something like an expert in everything—an artist, a logician, a mechanic, a doctor, a lawyer, an historian, a musician, an athlete, a mathematician, and more; or else he would have to call to his aid from time to time a team of such experts, all of them inspired by the moral aspects of their special subject matter. Nevertheless such a development is not beyond reason. A group of teachers, united by the common aim of illustrating in each field such aspects of obligation as might be found there, could easily enough organize such a course of instruction. For a single teacher to undertake it would be a difficult task, but a most interesting and rewarding one, for such a teacher would be led to adopt all knowledge as his province.

Assuming that the first step is accomplished, the second aim will be realized when the student is able not only to know these various obligations, each in its own field, but also to compare these varieties of imperative one with another. In this way

the significant differences between them may be emphasized while attention is also called to the fundamental resemblances between them. The facts of multiple obligation will also in this way be encountered and distinguished from confusion.

The final step will be some practice in the interpretation and classification of new imperatives. When new statements of obligation can be recognized as falling properly or genetically under this or that category, the nature of the debt or obligation which it asserts may be said to be understood. Since we are here concerned with ethical insight, not with approved conduct, such a course will undertake no indoctrination and will present no pleas for the acceptance or rejection of obligations that are studied. It might however be hoped that the student's personal choices will thereafter be made in a more rational and intelligent way.

Perhaps somewhere in the high school years is the proper place to introduce such a course of study in a didactic way. At least our experiments show that high school students are not very familiar with these categories and perhaps could profit from their study. No doubt in earlier years, when children are so interested in the "Why?" of things they do and are told to do or not to do, instruction of an informal sort could easily lead to familiarity with these concepts. Parents need not wait for high school teachers to instill into the minds of their children a sense of obligation and a knowledge of its varieties.

Instead of replying to questions of "Why?" by such answers as "Because I say so" or "Because it would not be right," distinctions could easily be made and simple terms for our imperatives used. Such answers, for example, as "Because it would not be beautiful," "It would not be useful," "It would be against the interests of our friends," "It would be unhealthy," and the like would easily lead to appreciation of the various kinds of *right* and *wrong*.

Some persons may feel that it is improper to use the word *moral* to refer to these distinctions, and to all of these categories of imperative. They do not feel that the imperatives of logic or of esthetics, for example, are moral. To these our reply would be that we here use *moral* as the equivalent of that

which has the values of right and wrong, good and bad. The fact that traditionally the word *moral* has come to be used more exclusively for the imperatives of creed, of legislation, of social welfare, should not bind us to this narrow usage. We should indeed be glad to extend the meaning of the word *conscience* so that it would cover our feelings with respect to all these imperatives.

CHAPTER 9

REVIEW AND SUMMARY

In this chapter there will be given a brief review and summary of the chief problems and conclusions of this survey. We have inquired into the psychological basis of the sense of obligation, of imperative conduct, and of moral evaluation. We have endeavored to discover the varieties of obligation and to exhibit the range of individual differences in the appreciation of such values. We have tried to assess the contributions in this field made by various current or classical systems of psychology and to present some of the weaknesses of various historical theories of ethics. A special point of view results from such a survey, and this we have elaborated, with considerations of its implications for the field of moral ideas. We have offered workable principles of evaluation for the guidance of individuals for whom the classical systems of ethics do not constitute a satisfactory philosophy of living together.

Experimental inquiry into the varieties of obligation (ought) as shown by adult classifications of imperative propositions revealed ten major categories: the oughts of inference, completeness, esthetics, social welfare, utility, safety, duty, convention, justice, and legislation. All of these involve the distinctions of right and wrong, good and bad, and we conceive that the dictates of all of them are moral in character. Insistence on some one of them, to the neglect of others, as the criterion of ethical conduct is a form of fanaticism, however benign its consequences.

These varieties of imperative appear to include the whole of voluntary human behavior, so that obligation is in a very real sense characteristic of all our acts and conclusions and value is not a dissociated realm of human experience. These

chief categories, differing in subject matter and in genesis, have in common the assertion of a particular item as the effective technique for the mitigation of misery, for the relief of a distress that is either expressed or tacitly implied.

The psychologies known as structuralism, behaviorism, Gestalt theory, and purposivism do not provide an adequate basis for the understanding of these fundamental imperatives, as is shown by an examination of each of them in turn. These systems therefore fail to provide a basis for the moral evaluation of conduct.

Endeavoring to avoid the errors and inadequacies of these classical systems of psychology, we propose a revision of this field. A psychological point of view is elaborated which might be called the viewpoint of descriptive naturalism. Three fundamental principles underlie it, and these are briefly stated and illustrated. These principles are those of (1) motivation or distress; (2) learning or cue reduction; and (3) control or scope.

Application of these systematic and fundamental principles has in other connections been shown to give a useful account of the facts of general psychology, mental development, dreaming, thinking, and mental abnormality, as well as the principles of effective teaching. They are here shown to provide an equally effective basis for the analysis and interpretation of the experience of obligation and of the varieties of imperative assertion.

One by one the primary categories or varieties of *ought* are examined, to show the bearing on each of the three general principles. Succinctly stated these principles are: Motives are Distresses; Learning is Cue Reduction; Control is a Function of Scope. Along with this discussion there are also introduced numerous related topics suggested by the analysis of the imperatives. Among these are demonology, a critique of formal logic, the technique of sympathy, social delinquency, the role of kinesis, the nature of neuroses, the higher and lower senses, development of conscience, varieties of Utopia, and methods of personal adjustment to thwarting and obstruction.

Following these analyses comes the exposition of a theory of value, a moral doctrine or system of ethical evaluation, based on the results of the foregoing interpretation of the experience of obligation and the genesis of the imperatives of thought and action. The fundamental psychological principles yield an instructive and helpful account of the nature of the good, the criteria of the moral, and the meaning of happiness, and give a sound basis for the hierarchies of distress and the techniques of alleviation characteristic of any given culture. Such an account is offered as a substitute for the cruder historical systems of hedonism, asceticism, utilitarianism, intuitionism, authoritarianism, logical idealism, and the like.

Important in this account, among other features, is the rejection of the classical bipolar theory of motivation and affection (feeling). Distresses are conceived as primary, and it is held that all pleasure is but the relief of initial distress. Happiness, moreover, is not mere absence of distress. It is the possession of a repertoire of effective techniques for eliminating the distresses incident to living. The supreme happiness is the level of playful mastery, on which the individual seeks out or devises difficulties for the sheer pleasure of mastering them. Such a point of view emphasizes the role of education as over against that of social reform.

Specific instances of conduct are examined in order to illustrate the distinctive features of this account of the problems of moral evaluation. It is also pointed out that there are in any category various degrees or intensities of imperative and that the categories themselves do not or need not as a whole have equal coerciveness. The classifications used in our discussion are indeed shown to be to some extent arbitrary, for continua exist between the categories and most imperatives have multiple determination, just as most effects have complicated causes.

The value and therefore the moral quality of an act we find to be determined by the completeness, the promptness, and the permanence with which it relieves the distress which is its motive, with a minimum of correlated misery in any creature or creatures, and by the recognized level of that irritant and of

that technique in the relevant individual and social hierarchies of distresses and of techniques.

We emphasize particularly the number and variety of the types of obligation, the categories of *ought*, and we find the highest ethical performance in conduct which takes all or many of these into account, in a joint synthesis and synergy. Blind adherence to one category, to the neglect of others, may for some purposes be effective and approved conduct. But such performance lacks scope and is obedience rather than moral action. Behavior is ethical to the degree to which it is based on adequate and informed scope which combines and integrates the impulses based on a variety of obligations.

We have described experimental methods for the measurement of individual differences in moral insight. Typical results are shown from the measurement, by these methods, of several hundred persons of varying age, education, and intelligence. Qualitative examples as well as test scores serve to show the surprising range of moral insight as thus assessed. Much remains to be done in the extension of such measurement procedures to larger sections of the population. A standardized scale should be feasible when sufficient preliminary exploration has been undertaken. The test in its present development serves many instructive purposes and throws a surprising light on the moral insight of different individuals.

The existence of such marked individual differences and the qualitative moral confusions exhibited suggest the desirability of improved methods of moral instruction. A few criticisms of prevailing techniques of such education are given. There is formulated and briefly described, for use with school classes and similar groups, the outline of a proposed course of training in the understanding of moral values.

There are venerable warnings of the futility of the logical analysis of moral values. The Preacher of *Ecclesiastes* was of this opinion when he wrote

. . . of making many books there is no end; and much study is a weariness of the flesh.

Let us hear the conclusion of the whole matter: Fear God, and keep his commandments: for this is the whole duty of man.

We have not been able, however, to resist the temptation to introduce logical analysis into the field of moral evaluation, and we hold to the belief that no matter how decent conduct may be it does not really have moral quality without insight into the principles underlying the imperatives that justify it.

APPENDIX 1

THE SEARCH FOR CATEGORIES

MATERIALS AND RESULTS

It is impossible that man should not be a part of nature, or that he should not follow her general order.—SPINOZA.

For the sake of clearness and in order to emphasize results and conclusions rather than methods, the experimental data and statistical procedures have been omitted from the main body of this book. For the use of readers with somewhat technical interests and for those who may wish to conduct further investigations similar to those here reported, such data should however be available. These data, presented in the three appendices which follow, relate especially to the conclusions presented in the first two chapters.

One Hundred Sample Imperatives—Preliminary Experiment (Plan 1)

INSTRUCTIONS

In the material with which you have been provided there are 100 cards. On each card is typed a statement or proposition containing the word "ought."

Examine the statements carefully and put the cards in piles according to the nature of the *oughts* in the different statements. We do not care whether the statements are correct or not. We are interested only in the *oughts*. Are they all alike, or are there different kinds of *ought*? For example:

That baby ought to be spanked.

There ought to be an eclipse tonight.

Do these belong together, in the same pile, or are the *oughts* different in character? Put these 100 statements into as many groups or piles as you like, depending on how many varieties of *ought* you find. But in each group put only *oughts* that are similar or belong together.

Each card has a number. Call your groups A, B, C, etc., and under each letter write the numbers found on the cards you have put in that group.

Finally, take a sheet of paper and do your best to write out a description of the different kinds of *ought* that you have found, and indicate to which group each description belongs.

STATEMENTS

1. The morning is clear; we ought to have a fine day.
2. We won the game and we ought to celebrate our victory.
3. That picture ought to have a wider frame.
4. This ought to be the road to Boston.
5. Every man ought to have a chance to work for his livelihood.
6. A room like this ought to be painted a lighter color.
7. Children ought to obey their parents.
8. In making introductions the younger person ought to be presented to the older.
9. If you are going to vote in November you ought to be over twenty-one years of age.
10. Every man ought to keep his promises.
11. Capital punishment ought to be abolished.
12. This ought to be about where I lost it.
13. They ought not to impose such burdens on the young.
14. This pudding ought to have more sugar in it.
15. One ought to be careful in the choice of friends.
16. We ought to render unto Caesar the things that are Caesar's.
17. You ought not to labor on the Sabbath day.
18. Those who drive cars on public highways ought to have drivers' permits.
19. You ought not to dive with your eyes shut.
20. Real estate owners ought to be responsible for taxes assessed against their property.
21. The wedding ring ought to be worn on the third finger of the left hand.
22. The school term ought to be longer than it is.
23. Teachers ought to be willing to work for small salaries.

24. If Tuesday was Christmas, this ought to be New Year's Day.
25. The stripes in a fat man's suit ought not to be horizontal.
26. Some cure for that disease ought to be discovered.
27. Children ought to be seen rather than heard.
28. Income tax ought to take into account a man's age and obligations.
29. The war ought to be over in a year.
30. That ought to be plenty of material for an overcoat.
31. A man like that ought to be whipped.
32. Anyone ought to be satisfied with eighty years of life.
33. Defective vision ought to be detected in early childhood.
34. This ought to be a better automobile than that.
35. Every dog ought to be entitled to two bites.
36. The pie ought to be done by this time.
37. We ought to start today if we want to be there by Friday.
38. A bed built like that ought to be very comfortable.
39. This piece of string ought to be long enough.
40. Eight tons of coal ought to heat that house for the winter.
41. The average room temperature ought to be about sixty-eight degrees.
42. The fish ought to bite well this morning.
43. Women and men ought to receive the same pay.
44. One ought not to take revenge into his own hands.
45. Youth ought to be patient with the prejudices of the aged.
46. With good treatment this pen ought to last a lifetime.
47. A fur coat ought to cost more than a woolen one.
48. You ought to have been able to buy it for half that price.
49. According to the traffic signs cars on this highway ought not to go over twenty-five miles an hour.
50. Every family ought to live within its income.
51. There ought to be a law against that.
52. Persons who are going to be married in New York ought to secure a marriage license from the proper authorities.
53. That black cover ought to have a gold border.
54. Five dollars ought to be a big enough allowance for any boy.
55. You ought to wear heavier clothing in the winter.
56. The strong ought to bear the burdens of the weak.
57. We ought to catch the bus if we take this short-cut.
58. A man ought to tell the truth regardless of consequences.
59. The climate of Arizona ought to improve your health.
60. Everyone ought to sleep at least eight hours a day.
61. You ought to brush your clothes before packing them away.
62. This knife ought to be sharpened.

63. This axe ought to have a longer handle.
64. You ought to hang up your tools, not leave them lying around.
65. The garden soil ought to be cultivated often but not too deep.
66. Arithmetic ought to precede algebra.
67. With his constitution he ought to live at least until morning.
68. Garden peas ought to be soaked thoroughly before planting.
69. Every room ought to have windows on at least two sides.
70. There ought to be a guard rail on these stairs.
71. Individuals ought to be allowed to vote after their eighteenth birthday.
72. You really ought to have an extra blanket handy.
73. Every flesh wound ought to be kept clean.
74. You ought to have your hair cut.
75. If you observe these precautions, there ought to be no danger.
76. A child of that age ought to be able to talk.
77. A bucksaw ought to be loosened up a little when it is not being used.
78. All motor cars ought to have effective brakes.
79. Six cylinders ought to make a car more flexible than four.
80. You ought to grip the handle more loosely.
81. Individuals ought to mate with those whose traits are similar to their own.
82. When walking with a lady a man ought to take the outside, next to the curb.
83. This road ought to be paved.
84. You ought to have seen him make a fool of himself.
85. Everyone ought to have a hobby as well as a main occupation.
86. Two ounces of it ought to be enough to kill a dog.
87. The chimney damper ought to be open while coal is being added to the furnace.
88. Frank would be better but John ought to be able to do the job.
89. Where there is so much smoke there ought to be some fire.
90. The text is all right but the footnotes ought to be in smaller type.
91. On that salary he ought to live very comfortably.
92. We have done many things we ought not to have done.
93. With a full-dress suit a man ought to wear a white tie.
94. Those who are closely related ought not to marry.
95. Verbal tests ought to be superior to motor tests in measuring intelligence.
96. A good classification ought to provide for all the actual cases.
97. A statistical graph ought to be intelligible without textual explanation.

98. In America a driver ought to keep to the right side of the road.
99. Feeble-minded and insane ought to be prevented from reproducing.
100. An oration ought to begin calmly and work up to a strong climax.

The Range of Discrimination in Adults

No attempt has been made to secure an adequate sample of any age level or other section of the population in the classification of these propositions. But nearly one hundred persons have now been asked to do the experiments described in the first chapter. It is surprising to note the wide range of their performance and it seems likely that there are interesting uses to be made of such material. The nature of some of the questions to be investigated may best be shown by a brief discussion of some of the arrangements that were made in the preliminary experiment.¹

In the first place it is clear that notable differences may be found on different levels of chronological and mental age. It might even be feasible to discover a typical developmental curve for the distinctions involved in this classification by adopting a scoring method in which an intelligent adult standard was approached by varying degrees. A few individual cases will be briefly described in order to illustrate the range of individual differences here described. Then a somewhat more quantitative analysis of some of the records will be made. Most of the present results are suggestive only; large numbers of cases must be secured before such quantitative results became dependable.

A nine-year-old girl with exceptionally high intelligence (I.Q. at least 175) wholly failed to appreciate the distinctions between the various categories of ought, although she spent over two hours making her arrangement. She finally arrived at four groups, described as follows:

1. Information and Instructions
2. Advice and Suggestions
3. Opinions about Life and Living
4. Guesses

¹ The original number of examples is too large for a convenient and careful survey of many individuals. The shortest time taken for this list of 100 propositions was 1.5 hours, and the time ranged from this minimum to 4 hours. Some of the categories have too many examples; some cards belong in more than one classification; the total list might easily be reduced to perhaps fifty sample imperatives, once it has been determined what categories are on the whole to be accepted as standard. This was done in later experiments and in those with high school and college students.

A boy aged thirteen (I.Q. at least Superior Adult) came very close to our own classification, with the following categories:

Boy's Description	Our Category
1. For the good of the object or article mentioned.....	Utility
2. For some one's personal good.....	Safety
3. Customary	Custom
4. For the good of all	Welfare
5. Probable	Inference
6. Safety.	Safety
7. Should in the sense of Duty.....	Duty
8. For your own fun.....(Our "Opportunity" under)	Completeness

Only the category of Beauty and that of Justice fail to be listed in this grouping; but it required a young adolescent with Superior Adult intelligence rating to make such an arrangement.

Three women, of above average intelligence and education, with various special talents, but unfamiliar with psychological experiments, wrestled with the propositions with these results:

One gave up after about two hours, saying that she already had fifteen or twenty classifications and had considered only about half of the propositions.

Another tried from time to time and said she just couldn't make any progress in the time she had for the work.

The third was able to put a few of the propositions together, but for the most part could only offer characterizations of single propositions.

But intelligent adults who succeed in making some arrangement differ widely in their classifications. Thus six professional psychologists, all of them with a Ph.D. degree, and experienced in both teaching and research, gave the following results:

A finds only three groups, which he describes as follows:

1. Oughts derived from physical experience with objects, but they can also be vicariously obtained. This classification implies specific past experience.
2. Similar to 1 and may be derived from it but they imply an unspecialized or nonspecific background of experience.
3. More indefinite; derived from general *social* and *economic* experience.

There are really only two groups recognized here—oughts based on physical or mechanical experience and oughts based on social and economic experience, and many propositions are put together that seem to other people to be manifestly different in their ground.

B goes somewhat further than A, arriving at a fivefold classification, as follows:

1. The ought involves esthetic standards or tastes.
2. Judgment is on the basis of convention, customs, moral codes, folkways, and mores.
3. The ought is in terms of good results, efficient performance.
4. Ought means expectation or prediction on the basis of facts known.
5. Evaluation is made in terms of personal or social happiness and welfare.

Here we have our categories of Beauty, Custom, and Duty (combined), Utility, Inference, and Welfare (which also explicitly includes the Safety category). That is, seven of our categories are recognized, the ones omitted being Completeness and Justice.

C, a distinguished and experienced professor of psychology and education, gives five very definite categories:

1. Based on religious or ethical assumptions
2. Based on esthetic standards
3. Rules of etiquette, or social customs
4. Social, political, or economic convictions
5. Based on science, common experience, and daily life

No recognition is here given to our categories of Safety, Completeness, Justice, or Inference.

D gives a classification which is nearly identical with the one we have used. If we suppose that "Wants or Lacks" corresponds to our Completeness category, all our groups are recognized except that of Justice:

- | | |
|--------------------------|-------------------------------|
| 1. Logical probabilities | 5. Etiquette conventions |
| 2. Moral codes | 6. Efficiency and convenience |
| 3. Health codes | 7. Social needs |
| 4. Esthetic standards | 8. Wants or lacks |

Finally, E and F, in consultation and taking three to four hours for the task, gave the following classification:

1. Obligations of custom or rules of etiquette
2. Esthetic criticism

3. Generalizations based on (a) certain inference, (b) common knowledge, or (c) on the basis of limited evidence
4. Obligations with respect to the moral law
5. Obligations to other persons, with less moral reference than in Group 4
6. Obligations of society to the individual
7. Specifying conditions which are generally desirable or undesirable
8. Implying conditions necessary for a specified end
9. Indicating an opportunity of which the individual might have taken advantage
10. Implying a personal or social lack or need
11. Implying greater or less degree of criticism of an object, an individual, or a social group
12. Appropriateness of a consequent following an antecedent
13. Generalization based on philosophy or point of view

The classification, though elaborate, is not clear-cut, and several bases are used; the item of censure or condemnation is added; but there are here recognized all the categories we have used. Distinctions are recognized that our list does not include, but by and large the same groupings are made and no new ones that our list does not provide for appear to be admitted.

These six cases, all of sophisticated and practiced observers, acquainted with experimental procedures, illustrate the results secured from intelligent and educated subjects. They range from a recognition of only two large categories to a more elaborate classification than the one we have employed. It is likely that a detailed study of such variations will yield interesting data on either the intellectual or the temperamental characteristics of the individuals concerned.

Classifications by High School and College Students

A college senior² carried out a modified form of this experiment as a special project. She constructed a revised and simplified list of propositions, fifty in number. These were given to high school students and also to college students, who were asked to classify the propositions according to the variety of oughts they presented. This simplified form of the materials made it possible to complete the classifications in from twenty minutes to an hour.

² Miss Edna Fredericks, guided by Dr. Lois Adams.

The results were clear enough, so far as the general problem is concerned. High school students failed to get the essential point. Their classifications were "for the most part according to subject matter." "A typical high school paper has the following categories,—plants, school, war, snow, truth, sports, courts, weather, etiquette, food, a room, money, students, and two unclassified." "The majority of high school papers have these and similar categories."

The college students gave such different results that "it would be possible for any one working with this test to tell whether the classification was done by a high school or a college student, with practically no errors." "There is almost no overlapping between the two groups. The difference is in the system of classification."

When the propositions were originally framed by this experimenter they were supposed to fall into one of six main categories:

1. Prediction, probability, logical inference
 2. Present moral obligations
 3. Moral reforms that should be brought about
 4. Utility
 5. Esthetics
 6. Etiquette
1. Most of the college students recognized the "prediction" category and placed under it the propositions designed to go there.
 2. The "morals" category also was generally recognized, although some students also placed under that head the "reforms" propositions.
 3. "Almost everyone had a category of 'reforms,' and it was usually designated as such."
 4. "'Utility' was one of the most difficult concepts—in most cases it was only those that had most of the other categories and high scores that had a category definitely corresponding to 'Utility.'"
 5. "Only a few, all with high scores, had a category corresponding to 'esthetics.' Most of the subjects mixed the cards of this group in with the utility category."
 6. "With very few exceptions everyone had this category" (etiquette).

No other category was used by any significant number of the college subjects. But some subjects had as many as thirteen categories and some as few as three. In this experiment, which tried to be quantitative, an attempt was made to give each subject a score on the basis of the number of the six fundamental categories recognized. No difference was found between lower- and upper-class students. Correlation of these scores with College

Aptitude Test scores was slightly but unreliably positive (+ .268).

Our own categories of Completeness, Justice, Law, and Safety did not emerge in this study as important or frequently used classifications. The most striking thing is that college status is required for the classifications to be made at all.

Even on the college level and above, as our preliminary cases show, individual differences are great. We might try to express these results quantitatively by giving one point credit for each of our standard ten categories recognized. On this basis the percentages of our subjects achieving various scores are shown in the following tabulation.

Score	% of Cases
8.....	28
7.....	6
6.....	20
5.....	14
4.....	6
3.....	20
2.....	6

The median score is only 6 out of a possible 10, and over a fourth of these college subjects do not score more than 3. But there is too much subjectivity in these ratings, for it is not always easy to decide the degree of correspondence between the subject's classification and the standard list. The results emphasize the desirability of devising a more adequate measure of whatever it is that this performance involves. The individual descriptions also suggest some of the qualitative difficulties that are encountered. Certain revised procedures are described on later pages.

In addition to the required classification of categories, or in place of it, certain other tendencies sometimes appear. The following list cites some of these tendencies. All of them are, from our point of view, irrelevant. Many of them involve degrees or a continuum, not categories or *kinds of ought*, and such distinctions are usually offered by subjects who fail to get the chief classification. This is not always the case, however; some good subjects also add such classifications, or include them as subdivisions of major groups. The irrelevant tendencies are:

1. Tendency to classify on the basis of the strength or urgency of the imperative
2. Tendency to distinguish between various degrees of confidence or certainty, or between various amounts of available evidence
3. Distinctions between those that apply to individuals and those that apply to society
4. Distinctions on the basis of the unanimity of opinion on the propositions
5. Distinctions between the oughts as affirmative and negative
6. Presence or absence of criticism or reproof intended in the assertion, and perhaps degrees of this approbation or disapproval
7. Distinctions on the basis of the importance or unimportance of the imperative, or of ignoring it
8. Irrelevant classifications on the basis of subject matter (people, animals, tools, weather)

One of the most instructive things, to one who watches this experiment, is the apparent obscurity of the instructions we have used. Subjects may classify the *propositions* in various ways, but not the *oughts*. One is puzzled to know how to give the instructions without directly suggesting categories. Perhaps in the end, for diagnostic purposes, this is the way it must be done: provide the list of categories and ask to have the propositions classified under the rubrics already provided.

But this makes the whole task a different one. There is an important difference between being aware of the categories initially (finding them in the material) and the more perceptual trick of classifying the material under headings already provided. We shall report in a later section the results secured by this procedure.

There is some evidence that subjects tend to adopt *one* of these categories as *the* basis of the moral, the right, what ought to be, and that this emphasis explains the neglect of the other possible bases. Thus one college girl said she could find only two categories of acts, "sins and not sins." Even the oughts of beauty and of hygiene (safety) seemed to her to be thus based. She said she had been taught that the ugly and the unhealthy and the inefficient were sinful.

It may be that for some the moral is the useful; thus we get utilitarianism. For others the sinful is the ugly, the unesthetic, the unpleasant; thus we get hedonism. For still others the good may be that which logic dictates, the consistent and harmonious,

and thus we get the rational idealists. Fixation on one of these categories might explain systems of ethics as well as the obliviousness of some of our judges. Perhaps the open-mindedness of an experimenter is more than can be expected even from intelligent adults, if they have given no special thought to the matter.

APPENDIX 2

FORMULATION OF A SCALE

METHODS AND RESULTS

Such persons will doubtless think it strange that I should attempt to treat of human vice and folly geometrically. . . . However, such is my plan. . . . I shall consider human actions and desires in exactly the same manner as though I were concerned with lines, planes, and solids.—SPINOZA.

Derivation of a Quantitative Test

Before reporting the results of a series of experiments on the measurement of imperative insight, occasion may be taken to point out a number of things not here investigated. Moral behavior need not conform precisely to ethical insight. Actual conduct, as we have repeatedly emphasized, involves not only the understanding of rules and principles but also the circumstances and motivations of the moment as well as the temperament and the habit history of the individual. We have not investigated the motives nor the habits of the subjects of our experiments. We do not know under what provocations they could be made to lie or steal or murder; we have not estimated the hierarchy of their individual distresses nor the prestige which various techniques of alleviation have for them. All of these things have a great practical importance, but we have not made them the subject of our study.

What we have sought to measure is the degree of insight into the varieties of obligation or imperative. Do our subjects appreciate the difference between ethical and esthetic requiredness? Do they see that justice, convention, and safety may all prescribe oughts, but that the duties or necessities dictated by them are different in their ground and meaning? Do they understand that the requirements of personal utility, of social welfare, and of a logical syllogism are not only different in quality and origin but may

represent requirements, all coercive, which may contradict one another? On a given occasion when an imperative or duty is faced, do they clearly or only confusedly realize which kind of obligation is driving them?

It may be that these are only cognitive traits or aptitudes that we investigate, and that the perception of imperatives is the work of sheer intelligence, like that involved in any sorting test. On the other hand it may be that feelings and emotions are tied up with these classifications. It may or may not be that these aptitudes are closely related to the daily patterns of conduct. Under any circumstances the relation between these measures and the daily habits of the people measured cannot be predicted except on the basis of further experimental or observational inquiry. But such inquiry is itself possible only when there are available such measures of insight or discrimination as those here considered. We therefore report these investigations not as a conclusion of the whole matter but rather as the initial stage of a program of inquiry that may require for its completion not only a long time but also the active cooperation of other interested experimenters.

Plan 2

One possibility in the way of a quantitative rating of individuals in their ability to recognize various forms of obligation is represented by the following procedure, which we shall call Plan 2. When it had been ascertained that the ten categories discussed in the foregoing sections include the chief varieties of ought, that list was adopted as a standard of reference. From the original list of one hundred propositions fifty were chosen so as to render the task easier. Propositions were chosen which the preliminary experiments had shown to be relatively unambiguous and to provide several samples for each of the ten categories. Ideally each category should be represented by the same number of samples. As it turned out, most of the categories are equally represented but there are too few for Completeness and too many for Utility.

The ten categories were briefly described and labeled as shown on the Instructions Sheet, a copy of which is given here. Intelligent and interested adults were then asked to classify the fifty propositions under these ten categories. On the basis of these arrangements by qualified judges the "correct" classification of each proposition was determined. Usually there is but one correct classification, but in a few cases two and in one case three categories need to be considered correct.

With this standard classification any individual arrangement can be compared. Those who may wish to duplicate the experiment will find the list of propositions (Form O) and the key to each in Chapter 2. The instructions given in that chapter are for Plan 4, later to be described. Perhaps the fairest method of scoring is to credit two points for each proposition classified correctly, thus giving a maximum possible score of 100 points.

The test follows:

INSTRUCTIONS

Plan 2

Here are fifty propositions all containing the word OUGHT. We do not care whether the propositions are true, or important, or not, but are interested only in the meaning of the OUGHT in each statement, in case some one should make it.

Below is a series of categories, each designated by a capital letter. In front of each of the fifty propositions put the capital letter showing to which of these categories that OUGHT belongs. In case of doubt do the best you can. If you need to, you may put more than one letter before a proposition, but in this case *underline* the one you think fits best.

CATEGORIES

- B—BEAUTY.** (Esthetic sense or taste prefers it.)
- C—CUSTOM.** (Conventional propriety, etiquette, or custom requires it.)
- D—DUTY.** (Religious scruples, ideals of conduct, or conscience are involved.)
- G—COMPLETENESS.** (Some occasion, situation, or pattern calls for it as the natural completion of its design.)
- I—INFERENCE.** (Certain premises or facts lead logically to the conclusion.)
- J—JUSTICE.** (Fairness and equity demand that this be the case.)
- L—LAW.** (Legislation, the statutes, or the police rule that this be.)
- S—SAFETY.** (Some code of personal safety or hygiene or the well-being and success of the individual requires it.)
- U—UTILITY.** (Practical expediency or usefulness or efficiency is the reason.)
- W—WELFARE.** (The world would be better for people in general if this were the case.)

Refinements of this procedure in Plan 2 are of course possible. Suitable preliminary studies could ensure that the standard categories were equally often represented in the material. Degrees of difficulty of propositions and of categories might be determined and scores distributed or weighted accordingly. A score of 2 points might be given for propositions put in the "best" category and 1 point for those located in a "second best" classification. But since the whole enterprise as here reported is tentative and exploratory the method we have used is probably complicated enough.

When this procedure is followed with only fifty propositions the pack of cards used in the preliminary investigation (Plan 1) may be dispensed with and all the propositions presented on a mimeographed sheet, accompanied by an Instructions Sheet. Responses then made by simply writing a letter before each proposition are permanently recorded. The group method may be used and the experiment is self-administering. No time limits were prescribed. A group of Barnard College juniors and seniors required an average of thirty minutes to complete the test by this Plan 2.

The endeavor is not to make this a test of alertness, ability to follow directions, speed of comprehension, or intelligence. Instead we seek to discover and measure individual differences in familiarity with and appreciation of the varieties of obligation or imperative. Much is undoubtedly lost by providing the subject beforehand with the list of standard categories, but the objectivity of the scoring is increased. It remains to be discovered how significant such scores are, what precisely they measure, and with what they are correlated.

A further word may be said here about the equal representation of all the categories. It is difficult to secure a list of propositions with precisely equal representation of all the categories because, for one thing, many propositions have two or more "correct" classifications. Only twenty-three of the propositions in our list are so unequivocally determined that the key assigns them a single correct answer.

The fault does not lie wholly in the propositions but in part in the complex bases of our obligations. Many oughts have complex and multiple foundation. If however we include all the possible correct answers recognized by the key, we find that, so far as possibilities of recognition are concerned, the various categories have reasonably fair representation. For all the categories except Utility

and Welfare (where there are too many instances) there are 6 to 8 propositions to which the category might correctly be applied.

It is possible that sufficient labor might achieve a list of propositions each with but a single foundation for its imperative. But it is doubtful whether the gain would justify this labor. Indeed such a list might not give superior results at all since it would be a somewhat eccentric collection. There is no way of readily discovering the actual relative frequencies with which these various types of imperative are experienced in the daily life of average people or even of people on a given developmental level. Moreover such frequencies would probably differ with developmental level.

Nevertheless it may be worth while to endeavor to construct a list giving more precise equivalence to the various categories than we have so far achieved. Steps have been made toward such a result, but the materials cannot be described at the present time since the experiments are still incomplete.

It may be well to describe at this point another procedure which has been tried out at some length in the search for a measure of ethical discrimination. Two plans have already been described. In what we call Plan 1, the subject is presented with an array of propositions and asked to classify them in as many groups as he wishes, the sole provision being that in each group there be placed only those oughts that resemble each other. The subject is required to discover for himself such categories as the material contains and, after he has made his classification, to indicate in his own words the nature of each category.

In Plan 2, which we have just been discussing, a list of categories is provided, giving in each case a general description and an abstract name, such as Justice, Utility. The subject is asked to arrange the propositions under these predetermined headings.

Plan 3

Plan 3 may have some advantages over both these procedures. Particularly it appears to be more concrete, to call for somewhat less abstraction, and to be capable of performance on a lower level of age, mentality, education, or ethical insight. Instead of the names and descriptions of categories, actual samples are used. For each category, determined in advance by the experimenter, two such samples are provided and designated by a key letter. The task of the subject under this plan is simply to place the propositions on the test sheet along with the samples they resemble. He

is thus provided in advance with a limited scheme of classification, a list which as a matter of fact comprises the ten categories made use of or arrived at in Plans 1 and 2. But he is not asked to define these categories; all he has to do is to decide which of ten pairs of samples a given proposition most resembles, so far as the meaning of its ought is concerned. The Instruction Sheet is here given, and at a later point typical results secured by this plan will be presented. Scoring is the same as under Plan 2.

INSTRUCTIONS

Plan 3

On this sheet are given several varieties of OUGHT or kinds of *obligation*. Each is indicated by a capital letter, and two samples are given for each. The two samples belong together because they illustrate the same kind of OUGHT. First read this list through carefully.

Letter	Samples
B	This green hat ought not to have a blue ribbon on it. To be pleasant this room ought to have windows on two sides.
C	Those in mourning ought to wear black. The guest of honor ought to be seated at the host's right.
D	Children ought to honor and obey their parents. We ought not to covet our neighbor's possessions.
G	Such music ought really to be played on a pipe organ. Children ought to be seen and not heard.
I	The morning is clear; we ought to have a fine day. This ought to be a better automobile than that.
J	Teachers ought to be willing to work for small salaries. Anyone ought to be satisfied with eighty years of life.
L	Your car ought to have a license plate on it. If you carry a revolver you ought to have a police permit.
S	Everyone ought to sleep at least eight hours a day. There ought to be a guard rail on these stairs.
U	You ought to grip the handle more loosely. You ought to cover these bulbs before cold weather.
W	Those who are closely related ought not to marry. Feeble-minded and insane ought to be prevented from having children.

Now take the second sheet. It contains fifty new propositions, each containing the word *ought*. In front of each proposition put the key letter (B or C or D, etc.), showing with which pair of samples on the Instructions Sheet the new proposition belongs. Consult the Instructions Sheet as often as you like, and take all the time you need. When in doubt do the best you can. If you need to you may put more than one letter in front of a proposition, but in this case *underline* the one you think fits best.

Plan 4

There is still another procedure that has been given preliminary trial. This we have called Plan 4, and the Instructions are essentially a combination of those used in Plans 2 and 3. The list of standard categories and their brief descriptions are given as in the case of Plan 2; in addition, for each category there is provided a sample assertion such as those used in Plan 3.

Such a combination of Plans 2 and 3 might conceivably facilitate classification of imperatives on the test sheet; it might assist in removing doubt or misunderstanding of the separate headings and enable even those who find the list of abstract categories and descriptions too formidable to make some progress with the task.

Results to be presented in the following section show that of Plans 1, 2, and 3, the first is the most difficult and is done with least confidence; the second is the easiest and is done with the greatest confidence and the highest scores. It would at least be logical to expect that, since Plan 4 contains all the features of Plan 2 and also provides an additional cue in the form of a definite sample, it might turn out to be the easiest of the four forms. Whether the easier or the more difficult plans will contribute most to the quantitative study of ethical discrimination only further experimentation will reveal. The Instructions for Plan 4 are given below. They constitute the present form of the Insight Test as described in Chapter 2.

INSTRUCTIONS

Plan 4

On this sheet are given several varieties of OUGHT or kinds of obligation. Each is indicated by a capital letter, by a brief description, and by a sample proposition. Read this list carefully.

Now take the second sheet. On it are fifty propositions, all containing the word *ought*. In front of each proposition put the capital letter

showing to which variety or category of OUGHT that proposition belongs. The description and sample on the Instructions Sheet may be referred to for guidance. If you need to, you may put more than one letter before a proposition, but in that case draw a line under the letter that you think fits best.

We do not care whether or not a statement is true, but only to what category it would belong, if anyone should make it.

CATEGORIES

- B—BEAUTY.** (Esthetic sense or personal taste prefers it.)
 “This green hat ought not to have a blue ribbon on it.”
- C—CUSTOM.** (Conventional propriety, etiquette, or custom requires it.)
 “Those in mourning ought to wear black.”
- D—DUTY.** (Religious scruples, conscience, or ideals are involved.)
 “Children ought to honor and obey their parents.”
- G—COMPLETENESS.** (Some occasion, situation, or pattern calls for it.)
 “Such music ought really to be played on a pipe organ.”
- I—INFERENCE.** (Certain premises or facts lead logically to it.)
 “The morning is clear; we ought to have a fine day.”
- J—JUSTICE.** (Fairness and equity demand that this be.)
 “Teachers ought to be willing to work for small salaries.”
- L—LAW.** (Legislation, police rules, or statutes require this.)
 “If you carry a revolver you ought to have a police permit.”
- S—SAFETY.** (For the hygiene, success, or well-being of the individual.)
 “There ought to be a guard rail on these stairs.”
- U—UTILITY.** (Expediency, usefulness, or efficiency is the reason.)
 “You ought to cover these bulbs before cold weather.”
- W—WELFARE.** (To make the world better for people in general.)
 “Those who are closely related ought not to marry.”

These different plans do not yield precisely the same standards of correctness, and there are certain other differences in the results. Plan 2 (with college students) yields decisive majorities, with relatively little scatter in classification. Plan 3 on the other hand gives very scattered judgments, some propositions receiving locations in as many as eight different categories. In six cases Plan 3 (with twenty-six adult judges) fails to yield majorities (propositions 10, 19, 21, 30, 40, 49), and “correctness” is therefore difficult to establish.

There is no way of knowing, without further experiment, whether these peculiarities of Plan 3 result because of the particular samples given in the Instructions Sheet, or whether they occur because the task by this plan is more difficult, resulting in more random or uncertain placements.

In the case of the propositions with no majority by Plan 3, several plurality categories have to be considered "correct." There are also two cases (1 and 16) where both plans yield majorities, but on different categories. Because of these variations, although they are not great, it is advisable to establish a standard classification, for purposes of individual scoring, by the same procedure that is used for testing, or else to combine the two standards and be lenient in the scoring of responses, giving credit for an answer that is correct according to either of the two plans.

For most purposes the "correct" classification given on page 31 may be used. This is derived from the combination of results from fifty-one competent judges on the college level, twenty-five of whom worked by Plan 2 and twenty-six by Plan 3. Where there is a distinct second choice by either plan or where the best response differs under the two plans, both answers are considered correct and are given in this list. This standard will therefore serve for either plan and fairly constitutes a standard against which classifications on lower levels of age, education, or intelligence may be checked.

For those who may be interested in detailed results there is given in the tables on pages 208-209 a distribution of the classifications of fifty-one judges, none below the educational level of college juniors. Of these twenty-five used Plan 2 and twenty-six Plan 3. The lists of the table show the occasional propositions on which the correct judgment differs by the two plans. Categories shown in parentheses are those given by relatively large minorities.

Some Representative Results

Although Plan 3 may appear at first sight to be simpler and more concrete than Plan 2, it does not follow that it is easier. At least for college juniors and seniors who did the test by both plans Plan 2 was reported as seeming easier than Plan 3. The instructions were described as "giving more definite guidance." For these students, when scored two points for each correct classification, the scores were twelve points higher by Plan 2 than by Plan 3. The average for Plan 2 was 79; for Plan 3 it was 67, and for

PLAN 2 (25 JUDGES)

No.	B	C	D	G	I	J	L	S	U	W	Key
1.....	—	7	—	18	—	—	—	—	—	—	G(C)
2.....	24	—	—	—	—	—	—	—	1	—	B
3.....	—	—	2	—	—	17	—	—	—	6	J(W)
4.....	22	—	—	—	1	—	—	—	2	—	B
5.....	—	23	2	—	—	—	—	—	—	—	C
6.....	—	—	—	—	—	—	25	—	—	—	L
7.....	—	—	22	—	—	2	—	—	—	1	D
8.....	—	—	14	—	—	4	—	—	—	7	D(W)
9.....	17	1	—	1	4	—	—	—	1	1	B
10.....	1	—	7	—	2	—	—	14	1	—	S
11.....	—	2	23	—	—	—	—	—	—	—	D
12.....	—	—	—	—	—	—	22	3	—	—	L
13.....	—	—	—	—	1	—	—	19	5	—	S(U)
14.....	—	—	3	—	—	6	16	—	—	—	L(J)
15.....	—	25	—	—	—	—	—	—	—	—	C
16.....	—	—	—	4	—	2	—	2	16	1	U
17.....	—	—	—	—	25	—	—	—	—	—	I
18.....	24	—	—	1	—	—	—	—	—	—	B
19.....	—	—	—	1	—	—	—	3	—	21	W
20.....	—	—	—	—	—	17	5	—	—	3	J
21.....	—	—	5	5	2	10	1	—	—	2	J(DG)
22.....	—	—	—	—	—	—	—	22	2	1	S
23.....	—	2	1	1	—	18	1	1	1	—	J
24.....	1	—	—	1	1	—	—	15	6	1	S(U)
25.....	—	—	—	10	15	—	—	—	—	—	I(G)
26.....	—	—	1	—	—	23	—	—	—	1	J
27.....	—	—	12	—	1	2	9	—	—	2	D(L)
28.....	—	1	—	2	18	1	—	—	3	—	I
29.....	—	—	—	1	1	—	20	3	—	—	L
30.....	—	—	4	1	—	—	—	3	13	4	U
31.....	—	—	—	—	—	—	24	—	1	—	L
32.....	25	—	—	—	—	—	—	—	—	—	B
33.....	—	—	—	—	5	—	—	16	4	—	S(I)
34.....	—	—	13	—	—	6	—	—	1	5	D(JW)
35.....	—	—	—	2	22	—	—	—	1	—	I
36.....	—	—	23	—	—	2	—	—	—	—	D
37.....	—	—	—	2	3	—	—	—	20	—	U
38.....	—	—	—	1	1	—	—	—	23	—	U
39.....	—	—	—	1	2	—	—	—	22	—	U
40.....	—	1	—	3	13	—	—	—	8	—	I(U)
41.....	—	1	—	1	—	—	—	—	23	—	U
42.....	21	—	—	1	1	—	—	1	—	—	B
43.....	—	—	—	—	2	—	—	—	23	—	U
44.....	—	1	—	2	2	1	—	6	1	12	W(S)
45.....	—	25	—	—	—	—	—	—	—	—	C
46.....	1	—	2	20	2	—	—	—	—	—	G
47.....	—	—	—	—	24	—	—	1	—	—	I
48.....	4	20	—	1	—	—	—	—	—	—	C
49.....	—	—	—	—	9	2	—	—	12	—	U(I)
50.....	—	1	—	—	—	—	18	6	—	—	L(S)

PLAN 3 (26 JUDGES)

No.	B	C	D	G	I	J	L	S	U	W	Key
1.....	2	3	—	1	19	—	—	—	1	—	I
2.....	24	—	—	2	—	—	—	—	—	—	B
3.....	—	1	1	1	1	16	—	1	—	5	J(W)
4.....	23	1	—	—	1	1	—	—	—	—	B
5.....	—	23	2	1	—	—	—	—	—	—	C
6.....	—	—	—	—	—	—	24	—	—	2	L
7.....	—	—	22	—	—	2	—	1	1	—	D
8.....	—	—	2	4	—	5	2	—	1	12	W(J)
9.....	20	1	—	3	1	—	—	—	1	—	B
10.....	—	—	7	4	1	4	—	6	—	4	DS
11.....	—	6	18	—	—	1	—	1	—	—	D(C)
12.....	—	—	—	—	—	—	24	2	—	—	L
13.....	—	—	—	—	1	—	—	15	8	2	S(U)
14.....	—	—	1	—	1	3	18	2	1	—	L
15.....	1	24	—	1	—	—	—	—	—	—	C
16.....	4	—	—	6	1	13	—	1	—	1	J(G)
17.....	—	—	—	—	18	1	3	1	3	—	I
18.....	21	2	—	2	—	—	—	—	1	—	B
19.....	—	1	—	4	1	3	1	7	1	8	W(S)
20.....	—	—	1	3	2	11	5	—	—	4	J(L)
21.....	1	—	4	8	1	4	—	2	1	5	G(W)
22.....	—	—	—	3	—	1	—	13	3	6	S
23.....	—	—	1	4	2	12	—	2	3	2	J
24.....	3	—	—	—	—	1	—	19	2	1	S
25.....	—	—	—	2	23	—	—	—	1	—	I
26.....	—	—	—	—	1	17	2	2	—	4	J
27.....	—	—	17	1	—	3	3	—	—	2	D
28.....	6	2	—	3	12	2	—	—	1	—	I(B)
29.....	—	—	1	1	—	—	22	1	1	—	L
30.....	—	—	4	3	2	7	—	5	3	2	J(S)
31.....	—	1	—	1	—	—	21	—	—	3	L
32.....	25	—	—	—	—	1	—	—	—	—	B
33.....	—	1	—	4	1	1	—	13	6	—	S(U)
34.....	—	—	17	3	—	2	—	—	1	3	D
35.....	1	—	—	2	22	—	1	—	—	—	I
36.....	—	1	19	2	—	3	—	1	—	—	D
37.....	3	—	—	2	1	—	1	1	18	—	U
38.....	7	—	—	2	—	—	1	2	14	—	U(B)
39.....	1	—	—	3	1	—	—	3	18	—	U
40.....	1	1	—	8	5	5	1	1	2	2	G(IJ)
41.....	1	—	—	1	—	1	—	2	21	—	U
42.....	12	2	—	6	—	1	—	1	4	—	B(G)
43.....	1	—	—	—	—	1	—	4	17	3	U
44.....	—	—	1	—	—	1	—	1	—	23	W
45.....	—	25	—	1	—	—	—	—	—	—	C
46.....	—	1	1	8	8	4	—	1	2	1	G(I)
47.....	1	—	2	2	18	—	1	—	1	1	I
48.....	5	21	—	—	—	—	—	—	—	—	C
49.....	1	—	1	5	6	6	—	3	3	1	GIJ
50.....	—	2	—	—	1	—	22	1	—	—	L

Plan 4 it was 72. Moreover this relation held for every individual. Below are the scores of ten upper-class students who worked by both plans. The correlation between the two sets of scores is + .83. The group is divided into high and low subgroups, this division being based on scores in Army Alpha, Otis Self-Administering, and general academic record.

Student	Plan 2	Plan 3	Difference
A.....	86	78	- 8
B.....	78	74	- 4
C.....	86	72	- 14
D.....	86	82	- 4
E.....	94	86	- 8
F.....	74	60	- 14
G.....	74	48	- 26
H.....	54	50	- 4
I.....	80	56	- 24
J.....	78	68	- 10

Although the cases are too few for statistical computations to be reliable there is a clear suggestion that high score in this test goes with high intellectual competence. On Plans 2 and 3 the median scores of the "high" group are 86 and 78, no score falling below 72. For the "low" group comparable scores are 74 and 56 and six of the ten scores fall below 72.

Furthermore it is the "low" group that most of all finds Plan 3 more difficult than Plan 2. For the "high" group the average difference between the two plans is 8 points, only one case being more than this. For the "low" group the difference averages 16 points, all but one of the cases falling above 8 points. There is therefore a suggestion that, as we go down the scale of general intelligence as measured by test scores, Plan 3 becomes increasingly difficult as compared with Plan 2. In developing this test for use on or below the high school level this finding may well be taken into account.

In another instance a class of thirty-two college juniors and seniors was divided at random into two equal groups. One group classified the propositions by Plan 2, the other by Plan 3. Those working under Plan 2 began to finish their arrangements earlier than the members of the other group; although there was a great deal of overlapping, it was clear that for these students Plan 2 took

less time and in that sense at least was easier. About thirty minutes and forty minutes were the average times for the two plans. The individual scores in these two groups were as follows, 2 points being credited for each correct proposition:

Scores of 16 Students Using Plan 2	Scores of Another Group of 16 Students Using Plan 3
98	82
92	82
92	80
88	78
86	76
84	74
82	74
82	72
82	72
80	72
80	68
80	66
78	62
76	60
72	54
60	52
Median 82	Median 72

Here we have the scores of two random halves of a class of college juniors and seniors. Those using Plan 2 have a median score of 82; those using Plan 3, a median of 72. This difference, 10 points, is very similar to that of 12 points found when the same group of judges worked by both plans. In general it seems fair to say that Plan 2 is about 10 points easier for college upper-class women such as those here reported.

The difference is not accidental. Only four of the Plan 2 scores are below 80, whereas only two of the Plan 3 scores are above that point. And although Plan 2 is the easier, it nevertheless is sufficiently difficult to differentiate these judges, no one of whom makes a perfect score. This makes Plan 2 suitable for the college level, and at least more suitable than Plan 3 for lower levels of age, education, or intelligence.

Plan 4 we have described as combining the instructions of Plans 2 and 3, and the expectation was that it would be easier than Plan 3 and perhaps than Plan 2, because of the additional amount

of guidance (an example) given in the Instructions. It was used with a group of forty-four college juniors and seniors in Barnard College, similar to those who in a previous year had used Plans 2 and 3.

From the point of view of speed at least it does appear to be easiest, and for testing purposes this is perhaps a merit. The average time taken was twenty minutes, as compared with thirty for Plan 2 and forty for Plan 3. The scores, by the usual method of crediting two points for each correct classification, are distributed as follows:

Score	Cases
68-70.	4
72-74.	4
76-78.	7
80-82.	9
84-86.	10
88-90.	6
92-94.	4

The median score is 82, the range being from 68 to 94. These scores are little different from those secured with Plan 2, although the time required is considerably less. And the median score is 10 points greater than that with Plan 3, which requires a still longer time; in fact all but four cases have scores higher than the median of Plan 3. So far as college students are concerned then, we may conclude that Plans 2 and 4 are about equally effective. The range of discrimination is good by Plan 4; the time required is short; no college students make perfect scores; and there is reason to suppose that it will be more suitable than any of the other plans for more elementary levels and ages. In fact Plan 4 appears to have precisely the advantages we had expected from it.

For seventeen students scores on the Scholastic Aptitude Tests (SAT) taken during freshman year were available. Since about half of these used our Plan 2 and half Plan 3, we have adjusted our own records by adding eleven points to scores by Plan 3, which was found to average that much more difficult. A suggestive comparison may then be made with the Scholastic Aptitude Test (SAT) scores. The data are as follows:

Subject	SAT Score	Ethical Insight
1.....	605	92
2.....	559	91
3.....	554	82
4.....	546	88
		Brightest Group
5.....	545	77
6.....	531	83
7.....	531	73
8.....	511	78
9.....	496	80
10.....	491	63
11.....	473	85
12.....	459	85
13.....	442	86
		Intermediate Group
14.....	436	83
15.....	415	78
16.....	358	65
17.....	323	60
		Dullest Group

In spite of the small number of cases and the dubious score adjustments, the results seem to indicate a genuine relationship between the two scores. The highest and lowest scores in our ethical insight test are made by the brightest and the dullest subjects. The four with highest SAT scores give insight scores ranging from 82 to 92, averaging over 88; the intermediate half of the group in SAT (nine cases) range from 63 to 86, averaging 79; the four lowest in SAT score range in insight scores from 60 to 83, averaging 71. This decline in averages from 88 through 79 to 71 indicates a real relationship, in spite of individual variations.

Another way of showing this relationship is to correlate the two arrays of scores, although our small number of cases does not make such procedure reliable. However unreliable statistically, the actual correlation, by the rank order method, is +.50. Still another method of comparison is available. An SAT score of 500 is supposed to represent the average college freshman's ability. Eight of our cases fall above this average line; their insight scores average 83; nine cases fall below the freshman average in SAT and their average insight score is 76.

If such results should be established by more comprehensive surveys they would mean that imperative insight as measured by our tests is in part a function of the kind of intelligence measured

by verbal and mathematical aptitude tests. This would not be surprising, for any operation requiring discrimination, classification, and comprehension of verbal instructions will be favored by high intelligence. We have already had occasion to comment on the relationship between intelligence and delinquency.

However there is some indication that this is not just another intelligence test. On any given level of scholastic aptitude there is a wide range of insight scores. Individuals with SAT scores around 500 (college freshman average) range in ethical insight scores from near 60 to almost 90, a range of 25 points. The total range from the brightest (SAT 605) to the least bright (SAT 323) is only a little more than this — 32 points.

Measurements on the High School Level

Results are available from one hundred students in the tenth grade of two different high schools. These are perhaps enough cases to show what is likely to happen on this educational and age level. The three groups will be designated I, II, and III and there is given first a brief description of the students, along with an account of the procedures used.

Group I consisted of thirty-eight pupils in a semirural consolidated high school in Westchester County, New York. They were mainly from the tenth grade, with a few from the eleventh—twenty-eight boys and ten girls, ranging in age from 15 to 18. They had been chosen by the principal as representative samples of the school population. Instructions to get a random sample do not always result in statistically representative cases, but in this case no clear basis of selection is indicated.

The experiment with this group was conducted by a substitute teacher who was interested in the project and had some experience in administering standard tests.¹ Special emphasis was laid on the careful study of the Instructions Sheet before the classifying began. The class engaged in discussion about some of the propositions, although this was supposed to have been done in such a way and at such a time as not to have influenced the judgments, which had already been recorded.

The Instructions of Plan 4 were used, and as much time was allowed as the individual wished. All were through by the end

¹ I am indebted to Mary Bagster-Collins for the administration of Plan 4 to this group and to the children in the sixth grade.

of a forty-five minute period, a somewhat longer time than that taken by the college students who used Plan 4.

Group II and Group III were students in a well-known New York City high school in which special emphasis is laid on moral instruction and classes in ethics comprise part of the course of instruction. It would be of interest to know to what degree special ethical instruction modifies the scores in such a test as this. Of course the comparisons here available do not show this, for the cases have by no means been equated in other ways with our other high school group. In these cases the tests were administered by the teacher of the courses in ethics.²

In Group II were thirty tenth grade girls. Group III was made up of thirty-two boys, twenty-seven from the tenth and five from the ninth grade. There was also a small group of twelve ninth graders, boys and girls who did the test at this time. This number is so small that no distribution of the scores is tabulated, but a general statement about them will be made at a later point. These special high school groups used Plan 2. We have shown that with college students Plans 2 and 4 do not yield radically different results. We have no evidence to show how Plans 2 and 4 compare with high school students. Presumably if there is a difference, Plan 2 would be the more difficult. This was the procedure used by Groups II and III, who were also to some undetermined extent selected directly or indirectly for superior general intelligence. These two differences would tend therefore to neutralize each other. Results from the three main groups are given in the table on the following page.

The small group of twelve ninth grade boys and girls already referred to gave scores ranging from 52 to 78 with a median at 64, not far from the median of the total larger group of tenth grade pupils, which is 62. The lowest median is that from the rural high school boys (54) which is about 10 points less than the median from the two urban high school groups. No difference between the scores of ninth, tenth, and eleventh grades is suggested, nor is there any difference that is consistent when boys and girls are compared.

Comparison of these high school scores with those from college students shows large differences. The difference in medians (62 and 82 points) is 20 points. A third of all the high school

²I am indebted to Dr. Th. Koester for arranging to have these tests given and for collecting the material and making certain studies of it.

Score	High School Groups, Tenth Grade			
	Rural, Mainly Boys (No., 38)	Urban Girls (No., 30)	Urban Boys (No., 32)	Total (No., 100)
Below 36.....	1	0	0	1
36-40.....	4	0	0	4
41-45.....	4	0	3	7
46-50.....	7	3	0	10
51-55.....	4	6	1	11
56-60.....	5	3	6	14
61-65.....	3	6	4	13
66-70.....	5	8	5	18
71-75.....	1	1	4	6
76-80.....	2	2	4	8
81-85.....	1	0	2	3
86-90.....	1	1	3	5
Median	54	62	66	62

scores fall below the lowest score (56) made by college students. All but two of the college scores fall above the high school median.

Age, within the limits here studied, seems relatively unimportant when other things are constant. Analysis of the rural high school group of thirty-eight pupils, containing boys and girls, shows that the medians for the sixteen- and seventeen-year-olds, who are "at age" in the tenth and eleventh grades, are 58 in both instances. Younger pupils (fifteen years) and older (eighteen years) make lower scores than these "at age" cases (51 and 54), although the cases are too small in number to make the difference reliable.

Measurement in the School Grades

Plan 4 was used with groups of pupils in three schools in a township in Westchester County, New York. There were in all sixty-three boys and girls with a median age of twelve years (only three were below eleven and two above thirteen). The tests were administered in the last week of the school year to pupils just completing the work of the sixth grade. The scores may therefore be said to represent sixth and seventh grade pupils in these schools.

All made some progress with the test in the forty-five minutes available. On a large number of the papers, however, many of the statements were assigned no classification. Questions asked by the pupils were numerous, but they had to do not so much with the

instructions as with the meaning of some of the words occurring in the statements on the test sheet. A test of this sort for levels below the sixth grade would require a simplification of the statements containing such words as *abolished*, *assessed*, *horizontal*, *infirmities*, *classification*. The scores ranged from 12 to 64, the median being 34, and were distributed as follows:

Score	Frequency
62-64	2
58-60	2
54-56	0
50-52	2
46-48	1
42-44	4
38-40	8
34-36	14
30-32	8
26-28	7
22-24	10
18-20	1
14-16	2
10-12	2

Only two of these sixth to seventh grade pupils reach or exceed the tenth grade median. When the histograms of the score distributions for sixth grade, tenth grade, and college are drawn, they picture very clearly certain striking relationships. The sixth to seventh grade and college groups are almost without overlap. Between the former group and the tenth grade the overlap is very much the same as between the tenth grade and the college scores. The lowest scores of each group almost exactly represent the mode of the scores of the group below it; that is, the lowest scores for the tenth grade fall in the mode for the sixth to seventh grade group, and the lowest college scores fall in the region of the tenth grade mode.

Tentative Standards

For the purpose of providing dependable norms more educational or age levels should be represented. There should of course

also be larger numbers of cases on each level than have been made available at present. We may however derive very useful standards, and determine at least three points on a developmental curve by combining all our groups to represent three main levels: sixth to seventh grade, high school tenth grade, and college (juniors and seniors), thus picturing results from 233 cases. In age these cases range through the teens, from eleven to twenty in the main. The distribution of the three groups, and certain summary figures from each, are shown in the following tabulation:

Score	Grades 6 to 7	High School, 10th Grade	College, Juniors— Seniors
98-100.....	—	—	1
94-96.....	—	—	3
90-92.....	—	—	6
86-88.....	—	4	13
82-84.....	—	3	15
78-80.....	—	3	14
74-76.....	—	9	8
70-72.....	—	8	7
66-68.....	—	12	1
62-64.....	2	14	—
58-60.....	2	11	1
54-56.....	0	8	1
50-52.....	2	7	—
46-48.....	1	8	—
42-44.....	4	7	—
38-40.....	8	3	—
34-36.....	14	1	—
30-32.....	8	1	—
26-28.....	7	—	—
22-24.....	10	—	—
18-20.....	1	—	—
14-16.....	2	—	—
10-12.....	2	—	—
Number of cases.....	63	100	70
Highest score.....	64	88	98
75 centile.....	38	72	86
Median score.....	34	62	82
25 centile.....	26	50	76
Lowest score.....	12	30	56

The scale ranges from chance score (10) to perfect. The sixth to seventh grade cases are at the bottom of this scale, the college students at the top, and the high school group midway between. The developmental progress is pictured by the respective modes

or by the medians. The modes are, in turn, from low to high, 35, 63, and 83. The medians are 34, 62, and 82. It is from these data that the tentative standards proposed in the body of the text (Chapter 2) have been drawn to assist in the interpretation of individual scores.

Among the plans we have used, differing chiefly in the form of the Instructions, Plan 4 which yields the scores here given appears to be the best. It is easy to understand, quick to accomplish, gives a wide range of scores, discriminates as far down as the sixth grade, and yet is difficult enough for college students. Certain details of the test can undoubtedly be improved.

Certain items on the test sheet, for which there are several "correct" answers, might be eliminated or changed. Something might be said for reducing the total number of items to thirty or forty, although fifty items give a more reliable score and do not present any special difficulty or require an unduly long time. By making slight changes in the vocabulary of the statements it might be possible to secure useful results for grades lower than the sixth.

The method of scoring could easily be refined, with partial credits allowed for certain answers. The present method of scoring assumes that all the items are equally difficult, but it may be that some of them are more likely than others to be answered correctly. Some kind of weighting of the items could take account of this, or new items could be substituted so that all have demonstrably equal difficulty. Certain changes in the standard key could be justified, especially in cases where there is considerable disagreement among sophisticated judges, and in cases where more than two different answers might be considered correct.

It might even be interesting to derive separate standard keys for the scoring of papers on different educational levels, although under such circumstances the comparison of scores would have an equivocal meaning. But experiments along this line might be justified by the observation that in some cases the understanding of an imperative naturally varies with the age and understanding of things in general. Consider for example the statement "In America a driver ought to keep to the right side of the road."

College students commonly realize that *which* side of the road the law prescribes rests finally on an old custom. High school students recognize that there is a legal regulation requiring the side of the road to be used. Grade-school children appear only to have been taught that "for the sake of safety" the right side of

the road should be used. College students thus rate this statement under the category of Custom, high school students under Legislation, and grade pupils under Safety. All are right according to the degree of their understanding. In spite of such observations we have preferred to use the sophisticated or adult understanding as the standard with which the replies of all others are to be compared.

Differential Use of Categories

A topic of possible interest is that of the relative use made of the various categories by different individual and experimental groups. Inexperience with one or more categories, or lack of comprehension of them, might be expected to be reflected in an indisposition to use them. Overuse of certain categories would in a similar way indicate something like a fixation or failure to discriminate.

To make such comparisons, in the case of groups, we have tabulated the frequency with which each of the ten categories were used, in terms of percentages of the total numbers of judgments (fifty from each member of a group, since there are fifty statements). Thus in a group of thirty judges there would have been 1,500 opportunities to use one or another category.

USE OF CATEGORIES
(Results from Form O)

Category	Percentage of Total Judgments Using Each Category				
	Grades 6-7	Rural H.S., Mainly Boys	Special Girls	Urban H.S., Boys	College Girls
Beauty.....	9.5	12.4	11.5	12.2	12.0
Custom.....	11.7	13.3	11.4	11.2	9.0
Duty.....	6.5	6.2	7.5	7.0	10.0
Completeness.....	7.5	8.9	7.1	5.2	7.5
Inference.....	7.8	11.7	12.5	15.0	12.1
Justice.....	10.6	11.8	8.9	8.2	9.6
Legislation.....	13.6	11.0	7.3	9.5	11.4
Safety.....	15.1	10.0	11.9	10.4	9.0
Utility.....	8.2	7.3	13.5	12.8	13.0
Welfare.....	9.5	7.3	8.4	8.5	6.4

A presumably correct usage, if the propositions were chosen to represent all categories equally (which is nearly the case) would be 10 per cent for each category. Any deviation above or below this figure would represent emphasis or neglect of a given category by the members of a given group. Here it should be remembered that according to the key there are in Form O too few statements belonging under Completeness and too many under Utility.

Of course random use of the categories, as in sheer guessing, would also yield about 10 per cent of cases for each category. But in such a case the individual scores would also approximate chance values. In the cases we have reported there is no instance of an individual score indicating a chance result.

In spite of the slight overweighting of the list with propositions belonging under Utility, the rural high school and the grade school pupils make scant use of this category. All groups but the college students neglect the category of Duty. The low figures for Completeness for all groups are in line with the key. All groups but the sixth to seventh grade pupils make overuse of the category of Beauty and neglect that of Welfare. Grades 6-7 lean heavily on the categories of Safety and Legislation and show inadequate appreciation of the importance of logical Inference. The favorite category of the rural high school pupils is Custom, a category which all groups except the college students overuse. Urban high school students, especially the boys, lean heavily on the category of Inference, which category is as a matter of fact overused by all but the sixth to seventh grade pupils.

The following summary, giving the first, second, and third preferences, from the point of view of usage, for the various groups is of some interest.

Group	Preferences		
	1	2	3
College	Utility	Inference	Beauty
Urban high school	Inference	Utility	Beauty
Rural high school	Custom	Beauty	Justice
Grades 6 to 7	Safety	Legislation	Custom

College and urban high school give the same categories preference, in slightly different order. Grade school pupils have a wholly

different set of preferences. Rural high school students come in between, having one category in common with each of the other groups. Such analysis of test results might afford useful guidance to the teacher by showing where, with a given group, appreciation is low and fixation high.

APPENDIX 3

REVISED ETHICAL INSIGHT TEST

Before all things, a means must be devised for improving the understanding and purifying it, so far as may be at the outset, so that it may apprehend things without error, and in the best possible way.

—SPINOZA.

The Need for Revision

The list of fifty test items (propositions containing the word ought) used in the original survey¹ of age and grade differences had certain imperfections. The list served very well the initial purposes, but required modification for use in quantitative studies. Some of the propositions were found to be ambiguous in meaning; on some of them expert judges did not agree closely; some of the categories were represented by too many samples, and some by too few. Ideally the test items should be unequivocal in meaning; their classification under the categories should show reasonably high agreement among sophisticated adults used as the standard of correctness; and if possible each category should be equally often represented in the total list of items.

In order to approximate these requirements a revised list of test items has been constructed. These items had to be chosen first of all by the experimenter, in the light of his experience with the earlier lists used. But his judgment was checked by submitting the new list of propositions, with the standard instructions, to twenty experts. All but two of these were professional workers of distinction in such fields as philosophy, psychology, education, law, history, and literature. The key used in scoring the revised list (Form R) is derived from the consensus of opinion of these twenty experts, according to the following principles.

¹ Reported in *Transactions of The New York Academy of Sciences*, Ser. II, VIII, 6, April, 1946. Fourteen items of the original list have been replaced by new items in the revised list.

The twenty judges chosen to determine the correct key for the revised list of items were chosen on the grounds of their expertness. However it is well known that experts sometimes disagree; if this were not the case one instead of twenty would have sufficed. The disagreements in the present instance are not great. On four fifths of the propositions a distinct majority (75 to 100 per cent) of the judges gave the same classification.

There are cases in which, although there is a majority, it is small; in one case there is a tie between two 40 per cent pluralities. In such cases it might be reasonable, in scoring new papers by the key, to give some credit to answers which fall into the second group of expert judgments if, for example, this second group includes at least some stated percentage (as 25 per cent) of the judges. As the detailed table of results shows, there are only four items in which the largest group of judges dissenting from the plurality or majority includes 25 per cent. In the key as here printed the percentage of experts agreeing on the category indicated is given in each case in which the figure is as great as 25 per cent.

For scoring purposes, therefore, we assume that the *best* answer is that given by the largest number of experts. Such *best* classifications we consider the only *correct* ones, and each is scored 2 points, giving a maximum possible score of 100 points. Omissions are of course counted as errors.²

REVISED LIST, FORM R

NAME _____ Where are you in school? _____

Grades

College

Your age? _____ 4 5 6 7 8 9 10 11 12 Fr. Soph. Jr. Sr.

Indicate by a capital letter the category to which each of the oughts belongs:

1. The guest of honor ought to be seated at the host's right.
2. That picture ought to have a wider frame.
3. If Tuesday was Christmas this ought to be New Year's Day.

² Those who desire may, where the majorities are small (say less than 70 per cent) give half credit (1 point) to answers falling in the second group when this group contains at least 25 per cent of the experts. Since but four items meet this requirement this procedure would make little difference in the scores.

4. Men and women ought to receive the same pay for the same work.
5. Every family ought to live within its income.
6. One ought to be careful in the choice of friends.
7. A room like this ought to be painted a lighter color.
8. To vote in November you ought to be at least twenty-one years of age.
9. This knife ought to be sharpened.
10. The fish ought to bite well this morning.
11. In making introductions the younger person ought to be presented to the older.
12. Every dog ought to be entitled to two bites.
13. You ought not to dive with your eyes shut.
14. We ought to round out this vacation with a side trip to Grand Canyon.
15. Individuals ought to mate with those whose traits are similar to their own.
16. Everyone ought to keep his promises.
17. This pudding ought to have more sugar in it.
18. A boy with a disposition like that ought to be named Percy.
19. This axe ought to have a longer handle.
20. Those driving cars on public roads ought to have driver's licenses.
21. The wedding ring ought to be worn on the third finger of the left hand.
22. You ought to live in a climate like that of Arizona.
23. Some cure for that disease ought to be discovered.
24. A fur coat ought to cost more than a woolen one.
25. A man like that ought to be whipped.
26. According to traffic signs cars on this road ought not to go over twenty-five miles per hour.
27. The strong ought to bear the infirmities of the weak.
28. An illuminated pageant on the water ought to include fireworks.
29. One ought to have a hobby as well as a main occupation.
30. We ought to catch the bus if we take this short-cut.
31. We won the game and now we ought to celebrate our victory.
32. With a full-dress suit a man ought to wear a white tie.
33. Garden soil ought to be cultivated often but not too deep.
34. Income tax ought to take into account a man's age and obligation.
35. Stripes in a fat man's suit ought not to be horizontal.
36. We ought to do unto others as we would that they should do unto us.
37. Feeble-minded and insane persons ought to be prevented from reproducing.

38. You ought to have seen him make a fool of himself.
39. Persons who are going to be married in New York ought to secure a marriage license.
40. Peas ought to be soaked thoroughly before planting.
41. We ought to render unto Caesar the things that are Caesar's.
42. A man ought to tip his hat when meeting a lady of his acquaintance.
43. A man ought to tell the truth regardless of consequences.
44. A bucksaw ought to be loosened up when not in use.
45. Where there is so much smoke there ought to be some fire.
46. A person ought to forgive those who trespass against him.
47. That black cover ought to have a gold border.
48. Estimated income tax for the year ought to be reported by March 15th.
49. Everyone ought to sleep at least eight hours a day.
50. Ability to read and write ought to be required of all voters.

Judgments of Experts

The table on the opposite page shows the distribution of the judgments of the twenty experts on each of the fifty items.

The intention to have each category represented by five items on the test sheet is almost perfectly realized when the experts' judgments are used as the basis of classification. The only departure is that item 5, which was expected to be a *W* item, turns out instead to be *W* (40), *U* (40).

Although each expert had a vote in determining the final key, it is instructive to assign to these judges correctness scores, in the same way that such scores are assigned to new subjects. These scores will show the individual's agreement with the expert consensus of opinion. They range from 66 to 100, the median score being 88. Only one of the experts has a score lower than 74, and half of them score 90 or better. Such a range of scores among individuals chosen on the basis of their presumed expertness suggests that in the case of other individuals also the simple quantitative score may not tell the whole story. Back of striking departures from the consensus of opinion may lie important differences in outlook, viewpoint, training, and general philosophy of life, as well as inadequate insight. It is possible that such departures from community judgment may show themselves as eccentricities in other aspects as well as those here studied. Low degrees of community of ideas may mark the radical as well as

Item Number	Categories (B for Beauty, D for Duty, etc.)									
	B	C	D	G	I	J	L	S	U	W
1.....	—	20	—	—	—	—	—	—	—	—
2.....	19	—	—	1	—	—	—	—	—	—
3.....	—	—	—	—	20	—	—	—	—	—
4.....	—	—	—	—	—	19	—	—	—	1
5.....	—	—	—	—	—	—	—	4	8	8
6.....	—	—	2	—	—	—	—	13	4	1
7.....	20	—	—	—	—	—	—	—	—	—
8.....	—	—	—	—	—	—	20	—	—	—
9.....	—	—	—	—	—	—	—	1	19	—
10.....	—	—	—	—	20	—	—	—	—	—
11.....	—	20	—	—	—	—	—	—	—	—
12.....	—	1	—	3	—	15	—	1	—	—
13.....	—	—	—	—	—	—	—	20	—	—
14.....	—	—	—	20	—	—	—	—	—	—
15.....	—	—	—	1	—	—	—	1	2	16
16.....	—	1	17	—	—	1	—	—	—	1
17.....	11	—	—	8	1	—	—	—	—	—
18.....	—	—	—	14	6	—	—	—	—	—
19.....	—	—	—	—	—	1	—	1	18	—
20.....	—	—	—	—	—	—	16	2	—	2
21.....	—	20	—	—	—	—	—	—	—	—
22.....	—	—	—	—	—	—	—	16	2	2
23.....	—	—	1	—	—	—	—	2	1	16
24.....	—	1	—	—	19	—	—	—	—	—
25.....	—	2	1	2	—	14	—	—	—	1
26.....	—	—	—	—	—	—	18	2	—	—
27.....	—	—	15	—	—	3	—	—	—	2
28.....	2	3	—	15	—	—	—	—	—	—
29.....	—	—	—	3	—	—	—	11	4	2
30.....	—	—	—	—	19	—	—	—	1	—
31.....	—	5	—	14	1	—	—	—	—	—
32.....	—	19	—	1	—	—	—	—	—	—
33.....	—	—	—	—	—	1	—	—	19	—
34.....	—	—	—	—	—	18	—	—	—	2
35.....	19	1	—	—	—	—	—	—	—	—
36.....	—	—	16	—	—	2	—	—	—	2
37.....	—	—	—	—	—	—	—	—	—	20
38.....	1	—	—	18	—	—	—	—	1	—
39.....	—	—	—	—	—	—	20	—	—	—
40.....	—	—	—	—	—	—	—	—	20	—
41.....	—	—	5	—	—	11	2	—	1	1
42.....	—	20	—	—	—	—	—	—	—	—
43.....	—	—	17	—	—	1	—	—	—	2
44.....	—	—	—	—	—	—	—	—	20	—
45.....	—	—	—	—	20	—	—	—	—	—
46.....	—	—	19	—	—	—	—	—	—	1
47.....	20	—	—	—	—	—	—	—	—	—
48.....	—	—	—	—	—	—	19	—	1	—
49.....	—	—	1	—	—	—	—	15	1	1
50.....	—	—	—	—	1	1	4	—	1	13
Frequency, Experts.	92	113	94	100	107	87	99	89	123	94
Frequency, College Seniors	108	106	78	96	101	118	108	84	117	84

the dullard; they may also result from thoughtless performance on the part of those who really know better.

KEY FOR REVISED LIST

1. C 100%	18. G 70% (I, 30)	35. B 100%
2. B 95	19. U 95	36. D 80
3. I 100	20. L 85	37. W 100
4. J 95	21. C 100	38. G 85
5. W 40, or U (40)	22. S 80	39. L 100
6. S 65	23. W 85	40. U 95
7. B 95	24. I 95	41. J 55 (D, 25)
8. L 100	25. J 65	42. C 100
9. U 100	26. L 90	43. D 80
10. I 100	27. D 70	44. U 95
11. C 100	28. G 75	45. I 100
12. J 70	29. S 55	46. D 90
13. S 100	30. I 95	47. B 100
14. G 100	31. G 70 (C, 25)	48. L 95
15. W 75	32. C 95	49. S 75
16. D 80	33. U 95	50. W 65
17. B 55 (G, 40)	34. J 90	

The table above gives also the percentage of experts agreeing on each of the indicated categories. Credit two points for each correct answer. Omissions count as errors. If subject gives more than one answer, count the *underlined* one (see Instructions Sheet). Final score is the total number of points.

The procedure of securing a standard of correctness for the final key by combining the judgments of twenty scientific and philosophical experts appears to have been an unnecessary precaution. College students give much the same consensus of opinion, and their judgments might well enough have been used for the final key. The first twenty papers that came to hand from college seniors (women in Barnard College) gave the same combined result (except for Item 50) as did the group of experts. Pluralities or majorities in both groups fell on the same preferred categories. In most cases also the actual percentages favoring the preferred categories were closely alike.

The chief difference was the larger number of cases in which the college judgments showed considerable numbers dissenting

from the preferred category and agreeing on a different one. There were eleven items for which the college group showed a second plurality of 25 per cent or more. The experts, that is to say, were in closer agreement on the preferred category, although the preferences were alike for both groups. A standard of correctness derived from the combined judgments of the college students is therefore as useful as that secured from the experts. This is especially the case if either of two answers be considered correct with items for which the first preference has but a small majority (or only a plurality).

Comparison with Original List

The revised list was used with new groups of college students (36 freshmen, 61 sophomores, 63 juniors, 48 seniors in Barnard College, 1947). The scores reveal two important facts.

In the first place the revised list (with single correct answers except for one item) appears to be of the same degree of difficulty as the original list (with alternative correct answers for about half of the items). The same median, the same distribution of scores, the same critical points for the grades X,A,B,C,D,F apply. The tentative standards given for the original list are therefore applicable also to the revised list, which contains fourteen changed items.

In the second place the median scores do not change from class to class in college. Seniors and juniors do no better than sophomores and freshmen. The senior, sophomore, and freshman medians are all 82; the junior median is 80. Whatever this test measures, it is something that a liberal arts education does not modify. It is, furthermore, something that has nearly reached its maximum development in college freshmen. As we have already seen, the median score of philosophical and scientific experts, derived from their own consensus of opinion, is 86, only 4 points better than that of college students. Training calculated to promote the kind of ethical insight here measured ought therefore to be undertaken earlier than the college level. We have proposed the early high school years; perhaps the early junior high school (seventh and eighth grades) would be still better.

The change from sixth grade median (34) to tenth grade median (62) probably represents genuine growth, little influenced by selection, and this is a shift of 28 points. The change of 20 points

between tenth grade and college may on the other hand be in large part due to the selection of the abler high school pupils for college.

Scores from College Students

Comparison of the experts with a sample of college students reveals certain differences in the frequency of use of the various categories. The college students show a relative neglect of the categories Duty and Safety; they overuse the category of Justice.³ The experts also neglect Duty and Safety, but the category of Justice they use least of all; instead, they overemphasize Convention. Since one of the items intended for Welfare is equally correct when marked Utility, the figures for these two categories cannot be directly compared. But their relative magnitudes indicate that both groups tend to emphasize Utility at the expense of Welfare. The line between these two categories is of course not

SCORES OF 208 COLLEGE STUDENTS ON THE REVISED LIST

Score	Seniors (No., 48)	Juniors (No., 63)	Sophomores (No., 61)	Freshmen (No., 36)
96.....	0	2	1	0
94.....	0	1	2	0
92.....	1	1	4	1
90.....	4	3	5	2
88.....	5	6	7	3
86.....	5	6	6	5
84.....	9	1	4	4
82.....	7	8	3	4
80.....	6	6	3	4
78.....	2	5	7	3
76.....	2	5	5	2
74.....	3	4	5	1
72.....	0	3	3	0
70.....	1	3	4	3
68.....	0	4	1	2
66.....	2	1	0	1
64.....	0	2	0	1
62.....	1	0	0	0
60.....	0	1	0	0
58.....	0	1	0	0
Median.....	82	80	82	82

³ That this is not always the case is shown by the records of college students reported in Appendix 2.

sharp; there is however a real difference which the experts appreciate somewhat better than do the students. Beauty is underused by the experts and overused by the college group. A larger number of cases would of course be required before these findings could be generalized.

The sample college scores are given in the table on page 230.

Grade Scores, Public and Private Schools

The revised list was used with seventy-five pupils in the latter half of the sixth grade. The pupils were from the same schools, in a city of Westchester County, New York, as those who a year earlier had used the original form, a sixth grade in each of four schools either in the city or in outlying villages.⁴ As in the case of the college students, the revised form gives the same distribution of scores as did the original form of the test. The median is again 34, there are no scores so low as to be due to chance, and the critical points for the letter grades X,A,B,C,D,F are so nearly the same that the same table of standards will serve for either form. Again there is evidence that the sixth grade is as low as the test should be used, for although there are no scores so low as the 10 points that chance might yield there are a number of scores

Score	Original Form (No., 63)	Revised Form (No., 75)	Combined Tests (No., 138)
66-68.....	0	1	1
62-64.....	2	4	6
58-60.....	2	1	3
54-56.....	0	2	2
50-52.....	2	4	6
46-48.....	1	6	7
42-44.....	4	7	11
38-40.....	8	11	19
34-36.....	14	10	24
30-32.....	8	7	15
26-28.....	7	9	16
22-24.....	10	6	16
18-20.....	1	4	5
14-16.....	2	3	5
10-12.....	2	0	2
Median.....	34	34	34

⁴ These tests were administered by Mary Bagster-Collins.

below 20, suggesting that on a lower educational level the task would be too difficult for chance not to play an important part. The preceding table gives the distribution of scores from these schools on the two forms of the test, the original and the revised, for children in the latter part of the sixth grade (May).

In order to observe the differential use of the various categories when Form R was used, the first forty papers were analyzed by distributing all the judgments (fifty on each paper) according to the category used. The results are very similar to those found with Form O and discussed in Chapter 2. The sixth grade children overuse the categories Custom and Legislation. They make the least use of the categories Justice, Duty, Completeness, and Welfare, with no notable tendencies in the case of the remaining categories. The percentages of use are as follows in the case of this group of sixth grade pupils using Form R.

Category	%
Beauty.....	9.8
Custom	16.8
Duty	8.3
Completeness	8.4
Inference	8.9
Justice	8.0
Legislation.....	12.8
Safety.....	9.4
Utility	8.9
Welfare	8.5

The revised form was also used with groups of children in the fifth, sixth, and seventh grades of a famous private school for girls in New York City.⁵ As might be expected, these highly selected pupils gave scores much higher than those secured from the sample of the public school population. The results for these groups are tabulated opposite. Since they are from very special groups of pupils, no use is made of these scores in formulating the general curve of development as shown in Chapter 2.

⁵ For the collection and scoring of these records I am indebted to Ann K. Worth, a graduate student in Columbia University.

SCORES FROM A PRIVATE SCHOOL FOR GIRLS

Score	7th Grade (No., 46)	6th Grade (No., 48)	5th Grade (No., 40)
94-96.....	1	—	—
90-92.....	1	—	—
86-88.....	1	—	—
82-84.....	2	1	—
78-80.....	2	4	—
74-76.....	4	2	1
70-72.....	9	5	1
66-68.....	7	2	2
62-64.....	5	7	6
58-60.....	3	7	5
54-56.....	3	1	4
50-52.....	3	3	5
46-48.....	3	4	1
42-44.....	0	8	3
38-40.....	1	2	5
34-36.....	0	0	2
30-32.....	1	2	0
26-28.....	—	—	2
22-24.....	—	—	1
18-20.....	—	—	1
Medians.....	66	60	52

Another reason for not incorporating these scores in the results on which the curve of development is based is that the examiner voluntarily reported various deviations from the standard instructions in administering the tests. She reports:

For the 5th and 6th grades I had to invent two or three sample questions, set up just like the actual test, before they grasped the idea. I think if there were samples you would eliminate the factor of poor scoring due to misunderstanding. Some of the vocabulary was difficult for the lower grades, but I defined the hard words for them.

The situation of course represents the common case where one not expert in psychometric requirements administers standard tests. Instead of the straightforward intention to discover how the scores compare under standard instructions and with standardized materials, there is substituted a desire to have all the scores come out as high as possible. The results are nevertheless instructive in showing how a selected group of subjects or a deviation in instructions, or both, may produce unusual scores.

Because of the temptation on the part of the nonexpert to mod-

ify the instructions, it seems likely that those who are not trained mental testers would do better to secure their own norms from their own groups and to compare their own individuals with these norms. Of course this forfeits about half of the value of a testing procedure, but it also helps to prevent certain gross misconceptions.

Validity and Reliability

With most tests of a psychological sort the question of validity is important. If a vocabulary test, for example, is to be used as a measure of something other than vocabulary, there must be available other criteria of the thing in question. Validity is determined by the agreement of the test scores with such other criteria. In the present instance the test does not pretend to measure anything not directly involved in its performance. It is for convenience called a test of "ethical insight," but this term as here used means only the degree of success in classifying these imperative propositions. Before the test could be claimed to measure anything other than that which is actually involved in its performance, this claim would have to be in some way demonstrated. In this respect the test is like a footrule or yardstick; these do not profess to measure anything other than length. Whether or not length (as in stature) is an index of anything else (such as strength or leadership) is not revealed by the footrule alone. We have made few comparisons of test score with other variables. Educational status, age, and verbal intelligence are the only such other features even considered, and we do not advocate the use of this test as the measure of anything except itself.

How dependably it measures those processes involved in its execution is the problem of reliability, as distinguished from validity. To determine this would require several trials of the test by the same population, or else the existence of two such tests, formally alike but comprising different items. Results at present available contribute little toward such a determination. We did find that when a small group of ten people used the same list of propositions twice, with slightly differing instructions in the two cases, the arrays of scores gave a positive correlation of .83. But this is too small a group of subjects, and the use of the same items, however far separated in time, may have involved a memory factor making for spurious correlation.

The method of "split halves" is sometimes used, in the ab-

sence of better methods, to give an indication of degree of reliability. Thus we might break up the list of fifty items into two shorter lists of twenty-five items each, using the odd-numbered and the even-numbered propositions to constitute these abbreviated lists. Correctness scores for the short lists might then be compared to see if those subjects scoring high in one also score high in the other. There are obvious shortcomings to such a procedure. Since the original list was prepared in a truly random order, there is no guarantee that the abbreviated lists will contain samples of all the categories, nor that they will be even approximately equal in difficulty, nor equally discriminative, nor that the smaller number of items will give as representative measures as the longer list afforded. In other words we might well expect the split-half technique to give correlations considerably lower than two long lists would have yielded. Presumably the longer list would have greater reliability than that suggested by the split-half technique. We hope that this is the case, for the correlations yielded by the split-half method are too small to suggest very high reliability.

We have applied the split-half technique to the papers of three groups of subjects as samples of what the correlations would be like on varying educational levels. In the case of seventy-five sixth grade children the correlation between scores on odd and even items is $+ .57$. In the case of sixty-two college sophomores the correlation is $+ .53$. For a group of forty-seven college seniors the correlation is $+ .32$. These are all raw correlations, uncorrected for attenuation or for other sources of error.

In view of the manifest inadequacies of the split-half technique, the statistical reliability of the test in the form in which it has been here used is still undetermined. There is some indication, in the decrease of these correlations with advance up the educational scale, that the reliability may be greater for those who find the test more difficult.

For purposes of measurement and quantitative comparison the revised list of items is undoubtedly superior to the original list. The propositions are for the most part unequivocal; they are quite uniformly classified by the experts; there are equal opportunities for all categories to be used correctly; and scoring is more straightforward and certain.

It must be said however that the original list has some advantages. Quantitatively it makes clear enough distinctions between individuals, and at the same time it facilitates interesting

comparisons of a more qualitative sort. The equivocal character of some of the propositions (for which there is more than one correct answer) makes it possible for predispositions in the use of certain categories to manifest themselves. When an ought is capable of establishment in more than one way it is instructive to see which of these possibilities an individual favors. Observations of this sort are almost excluded in the revised list, where the item is either classified correctly or simply failed. The nature of such errors can of course be studied and comparison made of the wrong uses of the respective categories; but the procedure here is more complicated. For purposes of qualitative study there is something to be said for a list of items each of which admits of two correct answers, with different weights given to answers described as superior, inferior, and failure.

APPENDIX 4

TENTATIVE OUTLINE FOR A COURSE ON THE MEANING OF OUGHT

The items under the main headings of the following outline are suggestive only. They are not intended to be a complete analysis, nor are they necessarily the very best items for use in presenting the chief categories. They are intended only to represent or to illustrate the kind of material that might lend itself to the explication or elaboration of the principal imperatives, provoke discussion about the variety of oughts, and lead to an understanding of their far-reaching implications and their origins.

1. *Introductory Concepts*: The Meaning of Obligation: Requiredness; Duty; Conscience; Necessity. The Varieties of Imperative Surveyed and Illustrated. Their Common Quality the Relief of Distress. Basic Psychological Principles—Motivation, Learning, and Control.
2. *Oughts of Beauty*: Esthetic Demands and Principles; Examples from Music, Poetry, Design, Architecture. Principles of Balance, Harmony, Proportion. The Nature of the Beautiful. Origin of Esthetic Standards. Measurements of Esthetic Appreciation.
3. *Oughts of Custom*: Propriety, Convention, and Etiquette. Primitive Mores and Folkways. Rules of Order; Parliamentary Law. Nature of Rules in Sports and Games. Style and Fashion. National and Cultural Variations. Concrete Examples from All These Fields.
4. *Oughts of Duty*: Religious and Institutional Codes and Creeds; Commandments and Duties. Allegiance to Individuals. Group Loyalties; Family Affections. The Role of Heroes; The Function of Ideals. Cults. Professional Ethics. The Principle of Honor; Chivalry; Bushido. The Origin of Conscience.
5. *Oughts of Completeness*: Gestalt and Configuration; Nature of the Gestalt Principles; Principle of Field Forces; Laws of Complex Completion and of *Prägnanz*. Totalitarian Philosophy; The One and the Many. Examples of Gestalt Principles (Visual Perception of Drawn Figures, etc.).

6. *Oughts of Inference*: Principles of Logic; Laws of Thought; The Syllogism, Valid and Invalid; Mill's Methods; Logical Fallacies; Occam's Razor; Evidence and Testimony; Logical Necessity; Euler's Circles; The Principle of Identity; Law of Undistributed Middle. Logic and the Psychology of Thought.
7. *Oughts of Justice*: Principles of Equity and Fair Play. The Principle of Honor. Impulse to Revenge. Balance and the Origin of the Sense of Justice. Meaning of Democracy; Majorities and Minorities. Rights and Privileges; Creditors and Debtors; Parents and Children; Rights of Person and Property; Life, Liberty, and the Pursuit of Happiness.
8. *Oughts of Law*: Meanings of Law. How Laws Originate; History of Lawmaking; Early Legal Codes and Lawgivers; The Roman Law; Constitutional Law; Common Law; Criminal Law; International Law; Statutes and Local Ordinances. Functions of Lawyers and Judges. Types of Deterrent and Penalty. Delinquents and Criminals.
9. *Oughts of Safety*: Principles of Hygiene; Rules of Health; Laws of Diet. Prevention of Fire and Accident. First Aid; Poisons and Antidotes. Codes for Bodily Well-Being. Codes for Social Success; Success Mottos and Rules for Prosperity.
10. *Oughts of Utility*: Effective and Ineffective Methods of Work; Good and Poor Ways of Learning; Trade Practice; Time and Motion Study; Occupational Analyses. The Taylor System of Scientific Management. Good Form in Athletics. Expert Skills—Gardening, Cooking. War; Tactics and Strategy. Laws and Rules of Expediency.
11. *Oughts of Welfare*: The Group and the Individual; The Social Impulse. The Consciousness of Kind; Animal Societies. Primitive Human Organizations—Family, Tribe, Church, State. Complexity of Modern Society; The Group in Peace and War; Group Loyalties; Nationalism and Internationalism. Socialist, Communist, and Capitalist Organization. Humanitarianism; The Technique of Sympathy; Self-Sacrifice and Social Ideals. Interest in Ancestors and Posterity. Welfare Movements; Utopias.
12. *Review and Summary of Types of Obligation*: Classical Ethical Theories as Partial Viewpoints. Rudiments of a New Ethics; Pain, Pleasure, and Happiness; Distresses as Motives; Hierarchies of Distress and of Techniques of Alleviation. The Happy Life. Measurements and Tests of Ethical Insight and Comparison of Individual Scores; Scores of Other Groups.

REFERENCES

As source material for discussion of the topics included in such a course as that here outlined, the following references may be useful. It should be noted that this is not a bibliography for the present book, but only a suggestive list for those interested in organizing such a course.

1. *Introductory Concepts*: H. L. Hollingworth, *Educational Psychology*, Part I; relevant chapters from any elementary text in general or educational psychology (learning, motivation, control).
2. *Beauty*: K. Gordon, *Esthetics*; A. R. Chandler, *Beauty and Human Nature*; R. M. Ogden, *The Psychology of Art*; H. Read, *Education through Art*.
3. *Custom*: W. G. Sumner, *Folkways*; E. A. Ross, *Social Control*; G. Tarde, *Imitation*; T. Veblen, *Theory of the Leisure Class*; F. H. Giddings, *Sociology*; L. Hobhouse, *Morals in Evolution*; E. Post, *The Book of Etiquette*.
4. *Duty*: J. S. Mackenzie, *Ethics*; J. Dewey, and J. H. Tufts, *Ethics*; D. Drake, *Problems of Conduct*; T. Carlyle, *Heroes and Hero Worship*; E. L. Heermance, *Codes of Ethics*; P. Symonds, *The Nature of Conduct*; see also the Ten Commandments, the Sermon on the Mount, the Apostles' Creed.
5. *Completeness*: W. Koehler, (a) *Gestalt Psychology*, (b) *The Place of Value in a World of Facts*, (c) *Dynamics in Psychology*; K. Koffka, *Gestalt Psychology*.
6. *Inference*: Any elementary textbook on formal logic (as A. L. Jones, J. E. Creighton, W. S. Jevons, J. S. Mill); J. Dewey, *How We Think*; H. L. Hollingworth, *The Psychology of Thought*.
7. *Justice*: J. S. Mill, *On Liberty*; L. Hobhouse, *Morals in Evolution*.
8. *Law*: Books on history of law; United States and state constitutions; income tax laws; traffic regulations; local ordinances and statutes; books on international law.
9. *Safety*: R. S. Woodworth, *The Care of the Body*; L. Clendenning, *The Human Body*; D. B. Klein, *Mental Hygiene*; L. Shaffer, *Psychology of Adjustment*; manuals on first aid.
10. *Utility*: Books on management, how to study, applied psychology, time and motion study; manuals on cooking, gardening, tennis, building, fishing, chess, and other games and sports.
11. *Welfare*: P. Kropotkin, *Mutual Aid*; E. A. Ross, *Social Psychology*; Plato, *The Republic*; B. F. Skinner, *Walden Two*; other utopias.
12. *Summary and Synthesis*: The present volume, especially the scale of measurement of ethical insight (pp. 25-50).

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